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ABSTRACT

This study examined the antecedents and consequences of stress encountered by junior high school teachers in their roles as organization members, with the school system as the employment setting. Chapter I presents an overview of the study and its four major objectives: (1) to determine organizational precursors of work-role stress among teachers; (2) to determine whether work-role stress produces distancing forces in teachers; (3) to examine the physiological, psychological, and behavioral consequences of work-role stress; and (4) to examine the impact of work-role stress on the effectiveness of teachers' functioning. In Chapter II, forms of role stress are identified as role conflict, role ambiguity, role overload, and role insufficiency. The environmental, organizational, interpersonal, job-related, and intrapersonal precursors of role stress are examined, and the consequences of role stress are explored. Chapter III offers discussions on sources of stress that operate specifically within a school setting. Stressors in the areas of the school environment, the school organization, and the classroom are considered. The fourth chapter describes the research design and methodology used in the study, including selection of the sample, instrument design, data collection, and analysis specification. In Chapter V, profiles of some teachers under high and low stress are presented, and an analysis is given of the circumstances in their lives and work environments that contribute to the stress they exhibit. Chapter VI offers discussions on methodological and substantive issues that emerged from the study. Chapter VII presents implications of the study for school administrators, teachers, and teacher educators, and the eighth chapter summarizes the study. References and some materials used in the study are appended. (JD)

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THE ORGANIZATIONAL ANTECEDENTS
AND
CONSEQUENCES OF ROLE STRESS AMONG TEACHERS

FINAL REPORT

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The Organizational Antecedents and Consequences of Role Stress Among Teachers

by

Nina Gupta
Principal Investigator

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September, 1981

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ABSTRACT

This study focuses on factors that stimulate work stress among teachers, and the consequences of stress. The relevant stresses include conflicting expectations, unclear/unpredictable expectations, too many/too difficult expectations, too easy expectations, and inadequate resources to meet expectations. Features of the work (organizational policies, job characteristics, discipline issues, etc.) and non-work (e.g., work/family conflicts) environment were examined as potential antecedents of stress. Effects of stress were explored in the terms of consequences dysfunctional to both the teacher (e.g., depression, alcohol use) and the school (e.g., tardiness, absenteeism).

Data were obtained through semi-structured interviews with 25 teachers from three public junior high schools in one school district. Results indicated that role stress was reported by some teachers, but was not endemic. Stresses most commonly experienced were too much work, unclear/unpredictable demands, and inadequate resources. The common antecedents of work stress included characteristics of school administrators and students, discipline issues, lack of job variety, gender, and teaching experience. The most prevalent consequences included job dissatisfaction, nervousness, and depression. Caffeine use, alcohol use, and dysfunctional work behaviors may also be exacerbated through the experience of stress. Implications of the results are derived for school administrators, school teachers, and teacher training programs.

UTILIZATION REPORT

The following documents have been prepared as part of this research:

Gupta, N. *Some sources and remedies of work stress among teachers.* Paper presented at the fourth annual summer conference of the American Association of School Administrators, 1981.

Gupta, N., & Jenkins, G.D., Jr. *Work role stress among female and male public school teachers.* Paper presented at the 89th annual convention of the American Psychological Association, 1981.

Gupta, N. *Stress in the work place.* Separate feedback reports to the principals of the three sampled schools, 1981.

Gupta, N. *Stress in the work place.* Feedback report to the teachers in the sample, 1981.

It is anticipated that at least the following documents will be developed in the future from this research:

Gupta, N. The school-related antecedents of teacher stress. To be submitted to *Educational Administration Quarterly.*

Gupta, N. Stress among public school teachers: A review of current empirical evidence. To be submitted to *Review of Educational Research.*

Gupta, N. Work role stress: An exploration of causes and consequences. To be submitted to *Human Relations.*

Gupta, N. Gender differences in the experience of role stress. to be submitted to *Psychology of Women Quarterly.*

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Chapter I

INTRODUCTION

The quality of education in any country is almost synonymous with the quality of teaching. The quality of teaching is, in turn, largely dependent on the characteristics of individuals serving as teachers--their training, aspiration, experience, their behavior in formal and informal roles within and outside the school system, as well as their general state of physical and emotional well-being. Furthermore, the stresses and strains that teachers undergo as functioning members of a bureaucratic organization--the school--can have a significant impact on their overall effectiveness as educators. By and large, though, teachers have not been studied in this context. That is, the role of teachers as organizational employees who are subject to pressures and demands, and who handle these stresses with varying degrees of success has been given scant attention.

A school is a work organization bearing resemblance in many ways to other employment organizations such as factories, hospitals, banks, or even volunteer associations. Schools can be described along various dimensions that typify other work organizations. They have, for example, specific goals, multiple levels of hierarchy, communication networks, prescribed roles, exchange relationships between employees and employers (where services are rendered in return for remuneration), and so forth. In view of these commonalities, it is reasonable to argue that the *dynamics* of school organizations will also be somewhat similar to the dynamics of other work organizations.

In the past two decades, extensive literature has indicated that organizational membership has a significant impact on the physical and psychological well-being of employees. Working in an organizational setting has been associated with symptoms of physical strain such as fatigue, symptoms of mental strain such as depression and loss of self-esteem, psychosomatic symptoms such as high blood pressure and peptic ulcers, and behavioral symptoms such as excessive smoking, high caffiene intake, and escapist drinking. It is clear from this research that the organizational milieu can be an important determinant of an individual's overall health. Furthermore, organizational membership can create forces in individuals that severely impair their ability to function as effective, contributing members of the organization. Some recent evidence suggests, for example, that job-related stress is associated with reduced performance, high absenteeism, and other manifestations of withdrawal from the work setting.

Much of the empirical work examining the impact of organizational membership on individuals has concentrated on the industrial organization as the employment context. Aspects of the job (the degree of autonomy, specialization, meaningfulness, etc.), aspects of the social climate (such as the relationships with supervisors and co-workers), aspects of the organizational environment (the hierarchical chain of command, the degree of bureaucratization, communications networks, etc.), and characteristics of the individual employee (e.g., need for independence, age, and number of dependents), have all been found to contribute to the consequences of organizational membership for an individual. Since these aspects of, and responses to, the work environment are by no means unique to industrial organizations, a justifiable extrapolation is that employment in a school system can have adverse *and* positive consequences for the teacher.

Despite the recognition that work-related stress may have deleterious effects on employees, and despite the recent acknowledgement that school teachers may be a highly stressed group, however, little systematic attention has been devoted to an elucidation of the causes and consequences of teacher stress. Questions such as "What organizational processes are uniquely potent as stressors for teachers?" and "Does work-related stress produce forces in teachers to distance themselves, physically or psychologically, from the school setting?" have remained largely unanswered in the available literature.

The present study proposes an empirical examination of the antecedents and consequences of the stress encountered by teachers in their roles as organizational members, with the school system as the employment setting. Teachers, like the blue-collar worker and the corporate executive, are employees seeking the gratification of a variety of needs from their participation in a work organization. The pressures to which teachers are subjected as a function of their roles are, if anything, greater than those experienced by the industrial employee. Not only do teachers receive role demands from immediate supervisors (as blue-collar workers do), they must also be responsive to pressures from school boards, students, parents, community organizations, their peers, and other sources. The relatively high degree of stress to which teachers are often exposed may or may not manifest itself in different physiological, psychological, and behavioral symptoms of strain. To the extent that it does, however, the effectiveness of the teacher is undermined, and the success of the school system threatened.

The consequences of work-role stress are also significantly more serious for all relevant parties if the many possible strain symptoms appear concurrently, rather than alternatively or sequentially. For instance, the situation would be much worse if teachers were simultaneously physiologically, psychologically, and behaviorally strained than if they experienced depression, but showed no symptoms of behavioral or physiological strain. The nature of the relationship *among* the different strains is, therefore, important for everyone--the teacher, the student, the school, and society at large.

Stress can affect, not only a teacher's physical and mental health, but also the effectiveness of his/her job-related behaviors. For example, a stressful school environment may reduce the quality of teachers' performance; it may also induce them to stay away from work often (high absenteeism) or to look for other job opportunities (high turnover). In other words, many work-related behaviors can be adversely affected by the presence of severe stress in the organizational environment.

The present study was designed to examine the organizational antecedents and consequences of work-related stress encountered by teachers, with the school as the employment setting. Specifically, the study had four major objectives:

1. To determine the organizational precursors of work-role stress among teachers;
2. To determine whether work-role stress produces distancing forces in teachers;
3. To examine the physiological, psychological, and behavioral consequences of work-role stress; and
4. To examine the impact of work-role stress on the effectiveness of teachers' functioning.

In addition, the relationships *among* the various consequences of work-role stress were examined in the study.

The study focused only on the intra-role experiences of teachers; i.e., stresses inherent in other roles were not examined. For example, aspects of role stress such as the conflicts between the professional and the familial role, or the consequences of inter-role conflicts on role strain were beyond the scope of the present investigation. A study examining all aspects of the teacher's life, though meritorious in intent, would be overly ambitious in scope, and probably unfeasible in a realistic span of time. The alternative strategy of first clarifying the experiences of and reactions to specific roles was seen as more reasonable in exploratory research. The present study, although limited in its purview to only the intra-work-role experiences of teachers, does attempt a systematic and comprehensive examination of these experiences. Such an examination should facilitate future research into other aspects of a teacher's life.

This report is organized around seven chapters beyond this one. In Chapter II, the substantive research literature in the areas of stress, strain, and withdrawal is reviewed and summarized. Chapter III spells out the conceptual approach adopted in the study. Chapter IV is a report on the research design, the methods, and the analysis strategies used. Chapter V presents the empirical results obtained in the research. Chapter VI contains a discussion and integration of the findings. Chapter VII presents the implications of the results for relevant groups. Finally, Chapter VIII summarizes the objectives, design, and findings of the research.

Chapter II

REVIEW OF THE LITERATURE

This chapter presents the research relevant to the concepts examined in the present study, and is divided into two sections. In the first section, the general theoretical framework for the study is presented. The second section incorporates the past empirical and theoretical work as it pertains to the experience of role stress among teachers.

Theoretical Framework

This study invokes a social psychological perspective on employment in work organizations, and focuses on the individual as the unit of analysis, rather than some administrative subdivision such as the work group, the department, or even the entire organization. Specifically, the theoretical approach draws heavily on the tenets of role theory (Sarbin & Allen, 1968) in the exposition of the impact of organizational membership on individuals.

Basic Concepts of Role Theory

An organization exists so that certain goals, implicit or explicit, can be achieved. These goals may vary within and between organizations, and may occasionally conflict with one another. Regardless of the number of different goals an organization may have, the degree to which these goals are explicit, and the compatibility of different goals, the organization cannot achieve them in a vacuum. Physical, financial, and human resources are necessary for the successful attainment of objectives. Our focus here is primarily on the human resources critical to effective organizational functioning.

The necessity for human resources produces a network of roles filled by individuals. The term *role*, borrowed directly from the theater, denotes that "conduct adheres to certain 'parts' (or positions) rather than to the players who read or recite them" (Sabin & Allen, 1968, p. 489). Within the organizational context, roles describe "specific forms of behavior associated with given positions; they develop originally from task requirements" (Katz & Kahn, 1978, p. 43). Many roles exist in a hospital, for example: physician, nurse, cook, custodian, administrator, etc.

The role incumbent holding a specific position under investigation is usually referred to as the *focal person*. Within the social structure of an organization, the role of each focal person is linked directly to certain positions, more remotely to some others, and only very tangentially to still other positions. The number of other positions to which each focal person is directly linked is relatively small, and collectively these other positions constitute the focal person's *role set* (e.g., Merton, 1957).

Members of the focal person's role set are generally interdependent with the focal person in some way (Beehr, 1974). This interdependence, in turn, results in beliefs and expectations held by the role set regarding the rights and privileges, the duties and obligations of the focal person's activities and behaviors. These beliefs and expectations, termed *role expectations*, form the conceptual bridge between social structure and role behaviors (Sarbin & Allen, 1968). Role expectations may be task-specific (e.g., performing at a minimally adequate level) or social (e.g., being polite to co-workers) in nature.

Members of a role set do not just hold expectations about the activities and behaviors of the focal person's role, they communicate these expectations in some way to the focal person. These communications from members of the role set (the *role senders*) are termed the *sent role*. Role expectations may be communicated in a prescriptive mode (as when the supervisor defines certain job duties for a subordinate), or in an evaluative mode (as when the supervisor gives positive or negative feedback regarding the focal person's role behavior). The sent role can be distinguished from the *received role*, which is the focal person's filtered perception of the sent role in the context of his/her own motives and expectations (Beehr, 1974).

Role Stress, Role Strain, and Withdrawal

Role theory is general in its application and relevant to most social contexts. Our interest in the present study is restricted to one social setting, viz., the work organization. Within the work organization, attention is focused on two specific concepts relevant to role theory--*role stress* and *role strain*. While these shortened labels will be used throughout the report, they will actually refer to *work role stress* and *work role strain* rather than to the more global phenomena implied by the shorter labels. Additionally, this report is concerned with a concept drawn from the general field of organizational behavior, viz., employee withdrawal.

The terms, stress and strain, have been used widely in the theoretical, empirical, and popular literature to connote a variety of different things, including characteristics of the objective environment (e.g., noise, glare, vibration), interactions between the person and the environment, and specific physiological reactions of an individual (e.g., level of serum cholesterol, heart rate, etc.). Although the terms, stress and strain, have often been used synonymously in the academic and popular literature, they are conceptually distinct. The technical definitions of the terms provided below are used throughout the body of this report, and the conceptual distinction between the two is maintained throughout.

Following Caplan, Cobb, French, Harrison, and Pinneau (1975), Harrison (1978), and Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964), role stress is defined as a function of both the focal person and the work environment. *Role stress* is the presence of received role demands from the environment which the focal person is unable to satisfy and which, therefore, pose a threat to the focal person. The inability to satisfy demands may stem from insufficiency of supplies to meet the demand (an environmental characteristic), or from lack of the relevant skills on the part of the focal person (an individual characteristic). This definition of role stress is consistent with one derived by Schuler (1980) after a thorough literature review. The author offered the following definition of stress:

> "*Stress is a dynamic condition in which an individual is:*
>
> a. confronted with an opportunity for being/having/doing what (s)he desires *and/or*
>
> b. confronted with a constraint on being/having/doing what (s)he desires *and/or*
>
> c. confronted with a demand on being/having/doing what (s)he desires *and* for which the resolution of (sic) is perceived to have uncertainty but which will lead (upon resolution) to important outcomes." (p. 189).

Role stress can be present in a variety of different forms. Among the more commonly researched forms of role stress are role ambiguity (unclear role expectations), role conflict (conflicting role expectations), role overload (lack of time or ability to meet role expectations), and role insufficiency (lack of necessary information, materials, equipment, etc., to satisfy role expectations).

Role strain, on the other hand, is an individual characteristic represented as a response by the focal person that deviates from normal. Role strain can be manifested in psychological (e.g., job dissatisfaction, tension, depression), physiological (e.g., peptic ulcer, high blood pressure) or behavioral (e.g., smoking, escapist drinking) symptoms (Caplan et al., 1975; Harrison, 1978). Furthermore, several different symptoms of role strain may be evident simultaneously.

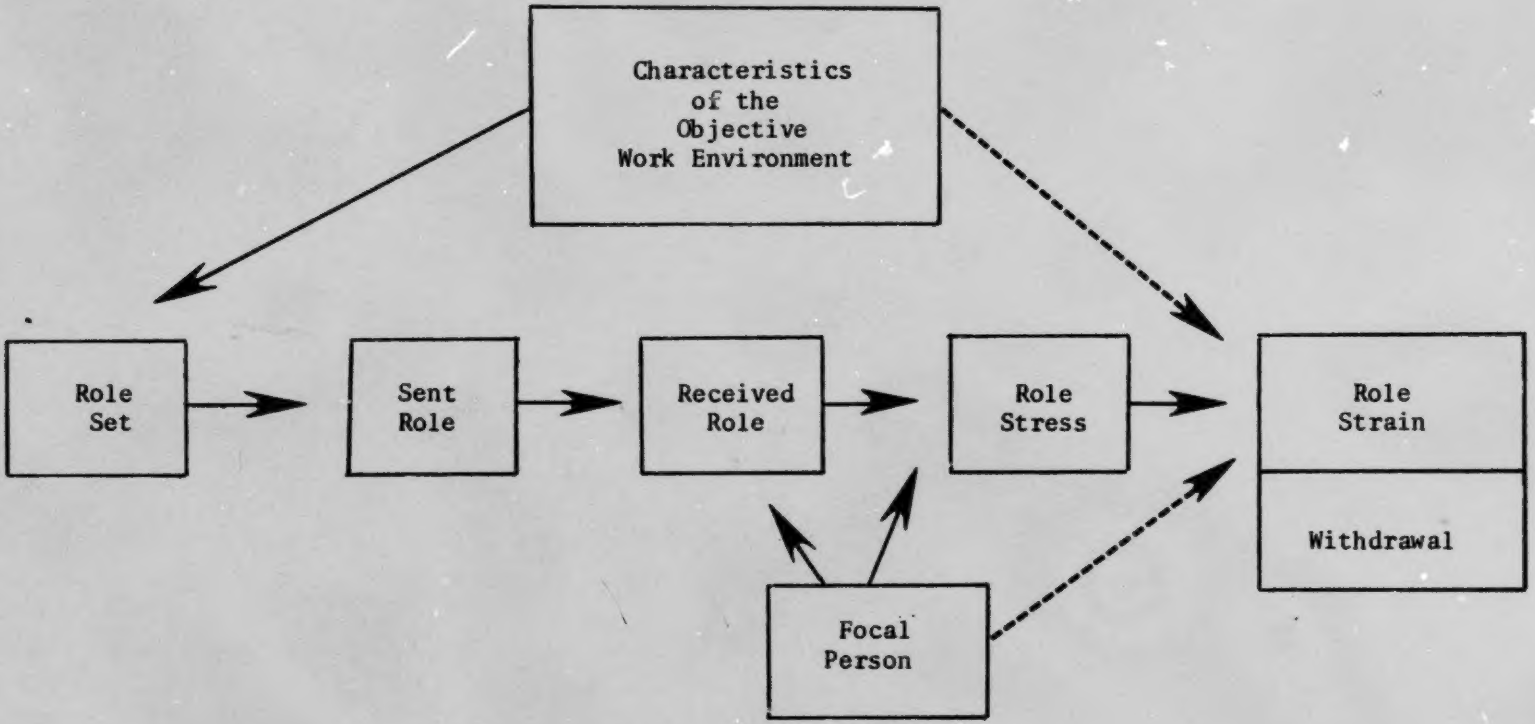
Withdrawal can be defined as "a volitional response to perceived aversive conditions, designed to increase the physical and/or psychological distance between the employee and the organization" (Gupta & Jenkins, 1980, p. 171). Employee withdrawal can also assume many forms, including absenteeism, tardiness, reduced output, etc. Although both role strain and withdrawal share the common antecedent of role stress, withdrawal is sometimes attributable to extra-organizational circumstances such as the transfer of spouse, the inadequacy of transportation, etc.

The theoretical framework used here is concerned with aspects of the role environment and characteristics of the focal person that are the sources of role stress (i.e., the *stressors*), the psychological experience of threat i.e., the stresses), the deviant responses to these stresses (i.e., the strains), and some job-related behaviors stimulated by stresses (i.e., the withdrawal manifestations).

This general model of role stress, role strain, and withdrawal is presented schematically in Figure II.1. As is obvious from the figure,

Figure II.1

Theoretical Model for the Experience of Role Stress, Role Strain, and Withdrawal


Characteristics of the Objective Work Environment
Role Set
Sent Role
Received Role
Role Stress
Role Strain
Withdrawal
Focal Person

NOTE: Solid arrows indicate direct effects. Broken arrows indicate moderating effects.

characteristics of the focal person and of the objective work environment are relevant at several points in the framework. They define, in various direct and indirect ways, what an individual's role experience will be and how the individual will respond to the role experience.

The model presented in Figure II.1 is general in nature. The theoretical and empirical research relevant to this model of role stress is reviewed in the next section. The specific conceptual model to be used in the investigation of the role stress, role strain, and withdrawal experiences of teachers is outlined in Chapter III.

Relevant Research

In accordance with the intra-organizational focus of this research, only the role stresses relevant to the work organization are examined in this review. The theoretical and empirical work relevant to intra-role stress and its consequences is divided into four broad categories here: (1) kinds of role stress; (2) situational and individual sources of role stress; (3) the physiological, psychological, and behavioral consequences of stress; and (4) the relationship between role stress and employee withdrawal symptoms. A growing body of literature has addressed the last two questions; the first two have largely been ignored to date. To the extent that role stress may be a significant determinant of an individual's physical and mental health, and to the extent that role stress is related to dysfunctional employee behaviors, however, it is important to ascertain the nature and determinants of such stress. Presumably, situational characteristics, the potential determinants of stress, can be modified more easily than subjective experiences can be.

Because much of the work on role stress, role strain, and withdrawal is conducted in non-educational settings, this review draws heavily from research done in other settings, although data specific to educational institutions are included where possible. In addition, the review focuses primarily on the *subjective* experience of stress, and concentrates on the perceived, rather than objective, components of the potential sources of stress.

Kinds of Role Stress

At least five major stresses have been studied in the past. These include role conflict, role ambiguity, role overload, role underload, and role insufficiency. Each of these stresses is discussed briefly in this section.

Role Conflict. This role stress is mentioned first because of its great popularity with students of both organizational behavior and education. Thus, Kahn et al. (1964) noted that role conflict is a rather ubiquitous phenomenon in an industrial society.

Role conflict can be defined as the degree of incongruity or incompatibility of expectations associated with a role (Miles & Perreault, 1976), or as a threat to the focal person in the form of incompatible role demands. At least four types of role conflict can be distinguished. First, different members of the role set may hold conflicting expectations for the focal person (inter-sender conflict). Second, the same member of the role set may hold conflicting role expectations for the focal person (intra-sender conflict). Third, the role expectations held by the focal person may be in conflict with the role expectations of the role set (person-sender conflict). Finally, the role expectations of the focal person or the role set may conflict with the personal characteristics, such as needs and values, of the focal person (person-role conflict). In addition, according to Caplan et al. (1975), conflicting role expectations may center around the issue of time (i.e., conflict over doing two different tasks in the same period of time), or they may involve the negation of one expectation by another (e.g., one person asks the cancellation of an order, another the shipment of the order.).

Role ambiguity. This role stress has often been confused in the literature with role conflict. Getzels and Guba (1955), for example, in an ostensible study of role conflict, used the term 'ambiguity' in some of their questionnaire items. Although role conflict and role ambiguity are similar in that they are detrimental to effective role behavior on the part of the focal person (Kahn & Quinn, 1970), the nature of the subjective role expectations differs between the two phenomena (Beehr, 1974).

Role ambiguity has been variously defined as "uncertainty or ambiguity about what is required...in the job" (Caplan et al., 1975); "the vagueness or absence of information regarding the expectations for one's role held by members of one's role set" (Beehr, 1974); and "lack of the necessary information available to a given organizational position" (Rizzo, House, & Lirtzman, 1970). According to Kahn et al. (1964), "role ambiguity is a direct function of the discrepancy between the information available to the person and that which is required for adequate performance of his role. Subjectively it is the difference between his actual state of knowledge and that which would provide adequate satisfaction of his personal needs and values" (p. 73). A similar definition of role ambiguity was also offered by Miles and Perreault (1978). On a related topic, Downey and Slocum (1975) suggested that "uncertainty can be defined as a state that exists when an individual defines himself as engaging in directed behavior based upon less than complete knowledge of (a) his existing relationship with his environment, (b) the existence of and knowledge of conditional, functional relationship between his behavior and environmental variables to the occurrence of a future (t_1) self-environment relation and (c) the place of future (t_1) self-environment relative within the longer time frame ($t_2 \ldots t_3$) of a self-environment relations hierarchy." (p. 571). All these definitions have in common a discrepancy between the actual and ideal level of information for adequate role behavior. This discrepancy could take the form of lack of sufficient information, or the vagueness of such information. Kahn et al. (1964) found that 35% of American wage-and-salary workers were disturbed by lack of clarity regarding the scope and responsibilities of their jobs, 29% by lack of clarity of their co-workers' expectations, 38% by the inadequate information to do the job, and 32% by uncertainty regarding supervisory evaluations.

Role Overload. This stress has sometimes been included in the role conflict classification (e.g., Kahn et al., 1964). These authors indicated that 45% of the male wage and salary workers were disturbed by having too high a work load, while 43% were disturbed by the fact that the quantity of work they had to do interfered with its quality. The rationale behind subsuming role overload under role conflict was that people often experienced role overload as a conflict between quality and quantity. Following Kahn and Quinn (1970) and Beehr (1974), role overload is conceived of here as having too much work to finish in the time available. Role overload, therefore, refers primarily to time pressures experienced by focal persons, and bears little conceptual resemblance to role conflict. That the *experienced* component of this role stress differs empirically from the objective component becomes clear from a study by Sales (1969), who found a correlation of only .40 between objective and perceived role overload. Furthermore, it has been suggested (Katz & Kahn, 1978) that quantitative overload (having too much work to do) should be distinguished from qualitative overload (having work that is too difficult to do).

Role Underload. This stress refers to role expectations that are too easy or too few in number. Thus, two aspects of role underload can also be distinguished. Quantitative underload refers to having few role expectations, and qualitative role underload refers to the ease with which role expectations are met. Thus, role underload can be viewed as having too little work to do, or as the underutilization of skills and abilities that an individual may have acquired through schooling or experience. The second, underutilization component is the one that has been researched often in the past. Few authors have, however, attempted to establish thorough conceptual linkages between role underload on the one hand and role strain on the other.

Role Insufficiency. This role stress is concerned with the inadequacy of materials and supplies necessary for successful role performance, and bears conceptual resemblance to some of the other stresses. Inadequacy of time to meet role expectations, for example, is subsumed under quantitative role overload; likewise, when inadequacy of information centers on role expectations, role ambiguity occurs. In other words, role insufficiency occurs when the role expectations *are* clear, but when the materials and resources (other than time) are not available to meet these role expectations satisfactorily. Like role underload, role insufficiency has been examined only infrequently in the past.

Other Role Stresses. A plethora of other variables has also been labeled stresses in the past. These include phenomena such as the amount of noise and light in the workplace (clearly characteristics of the objective environment), relationships with supervisors, peers, and subordinates (global variables whose relevant aspects can easily be subsumed under the five stresses discussed above), and job monotony (a characteristic of the job). These other phenomena cannot be considered stresses under the definitions and conceptual framework used here; some of them will be discussed, however, as potential precursors of the experience of role stress.

Sources of Role Stress

It was mentioned earlier that, in the past, researchers from widely diverging fields displayed a fondness for discovering the consequences of role stress. Several authors (e.g., Newman & Beehr, 1979; Selye, 1974; Van Sell, Brief, & Schuler, 1981) have also tried to identify the personal and organizational strategies optimal for coping with stress. A shift in focus to the precursors of role stress, however, paints a different picture. Here the work seems to be quite fragmented and little more than an inferential determination of the precursors of role stress is possible. Since role stress *is* a significant determinant of people's physical and mental health, and since role stress can affect the effectiveness of people's functioning (see next two sections for the relevant literature in this context), however, the omission of a systematic investigation of its causal dynamics is serious. Such an investigation could do much to provide the insights necessary for the reduction of role stress among employees in various organizational settings.

Though systematic investigations of the precursors of role stress have been conducted rarely, various typologies of the sources of role stress have been proposed in this regard. Landy and Trumbo (1976), for example, proposed the following intuitive list of the causes of stress, or stressors: job insecurity, excessive competition, hazardous working conditions, task demands, and long or unusual working hours. Gross (1970) provided three broad classes of sources of stress: organizational careers (not losing job, career advancement, disengagement), task (routinization of work, task difficulty), and organizational structure. McGarth (1976) delineated six sources of stress: task, role, behavior setting, physical environment, social environment, and characteristics brought by the person to the job. Poulton (1978) offered the following list of blue-collar stressors: poor visibility, noise, vibration and motion, temperature and wind, atmospheric pollution, atmospheric pressure, heavy work, perceived danger, work overload and underload, night shifts and loss of sleep. Cooper and Marshall (1975, 1978) listed sources of managerial and white-collar stresses in a progression from individual-centered to total environment-centered. Their list includes factors intrinsic to the job (e.g., working conditions, work load, time pressures), role factors (e.g., ambiguity, conflict, responsibility), relations within organizations (e.g., with superior, with subordinates, with colleagues, personality conflicts), career development (e.g., promotion, job security), being in organizations (e.g., lack of effective consultation, restrictions on behavior, office politics), organizational interface with outside (e.g., marriage partners, mobility), and factors intrinsic to the individual (e.g., personality, inability to cope with change, etc.). Among the objective role requirements that Miles and Perreault (1976) related to multivariate role conflict orientations were the importance of selected job activities (integration and boundary-spanning activities, personnel supervision, and scientific research) and role set characteristics (organizational distance and formal authority of role senders). Parasuraman and Alutto (1981) proposed a two-step framework where contexual variables (subsystem, shift), role variables (job level), and task variables (autonomy, complexity, interdependence, routinization, closeness of supervision) precede the occurrence of stressors (interunit conflict, technical problems, efficiency problems, role frustration, staff shortages, short lead times, and too many meetings), which in turn result in the experience of stress. Kets de Vries (1979) offered the following list of stressors: organizational design variables (physical work environment, incentive system, technology, role pressures, work load, and boundary activities), interpersonal variables (leadership style, absence of group cohesion, lack of participation and responsibility for people), and career variables (occupational level, entry, mid-career, retirement, demotion, stagnation, sequence, and obsolescence).

It is clear that sources of stress have often been confused with aspects of stress in these classifications. Furthermore, even when the sources of stress are defined, they vary considerably in their specificity. In the present conceptualization, five broad categories of stressors are considered important, viz.: 1) environmental or extra-organizational stressors, 2) organizational stressors, 3) group or interpersonal stressors, 4) job-related stressors, and 5) intrapersonal or individual stressors.

Environmental stressors refer to relevant external influences on the organization and organizational participants, for example, the client system of a service organization. Organizational stressors refer to system properties of the total organization such as size, communication networks, hierarchical structure, etc. Interpersonal stressors refer to the nature and quality of relationships with various role senders. Job-related stressors include characteristics of the task, e.g., responsibility for others, variety, etc. Finally, intrapersonal stressors are characteristics that the individual brings to the organizational setting, such as personality traits, values and biographical factors. Each of these potential stressors is discussed below.

1. Environmental Stressors. As mentioned earlier, environmental or extra-organizational stressors characterize the external environment. At least three environmental variables may have an impact on work-related stress. These are the prevalence of boundary-spanning activities, multiple role incumbency, and occupational status/organizational rank.

Kahn et al. (1964) reported at length about the stress experiences of individuals in *boundary-spanning* positions in organizations. Individuals who must be responsive to the role expectations of people outside formal organizational boundaries, as well as to the role expectations of organizational members, i.e., individuals in boundary-spanning positions, are considered particularly susceptible to stress. The classic case concerns the factory foreman as the "man-in-the-middle," subject to the role expectations of both the upper management and the subordinates. Kahn et al. (1964) found that positions located close to the surface of organizational boundaries, such as those involving labor negotiations, customer contact, etc., were subject to greater stress than were positions farther away from boundaries. These findings have been replicated and extended in a number of studies, the research indicating that the visibility of the boundary position may be significantly related to the experience of stress (e.g., Adams, 1976; Dailey, 1979; Miles, 1975, 1976a, 1976b; Miles & Perreault, 1976; Organ, 1970). Using cross-lag correlations, Keller (1978) found no causal relationships between boundary-spanning activities and role conflict and role ambiguity, although causal, positive relationships were suggested between boundary-spanning activities and satisfaction. In a related vein, Rogers and Molnar (1976) found that the number of *interorganizational* contacts was significantly related to experienced role conflict (but not ambiguity).

A frequent characteristic of boundary positions is the lack of formal power over members of the role set. The foreman has little formal power over upper management, the teacher over the community, or the salesperson over customers. A boundary role-occupant is confronted with a large number of role senders whose role expectations may be hard to predict or satisfy, and whose role demands he/she has little or no authority to cancel or modify. It is not surprising that under these conditions the focal person in a boundary position would experience role stress.

Public school teachers, in addition to being the recipients of role expectations from a multitude of intra-organizational sources, also have parents, the community at large, etc., as role senders. Using the case of the teacher as paradigmatic, Merton (1957) remarked that "the teacher may... become subject to conflicting role expectations among...professional colleagues, influential members of the school board and...the Americanism Committee of the American Legion. What is an educational essential for the one, may be judged an educational frill, or as downright subversion by the other." (p. 112). Similarly, Wilson (1962) noted that "the role-set of the teacher is especially formidable...because everyone in contemporary society has ready opinions about what the teacher does and should do." Lieberman (1956) contrasted teachers, who believed the community must be "sold" on every decision, with physicians: the latter group does not require a community poll before experimenting with a new medicine or procedure.

This research suggests that the extent to which teachers perceive their roles to be visible, boundary-spanning ones will determine in some measure their experienced role stress.

Multiple role incumbency concerns the number of different roles that the teacher is simultaneously fulfilling. A teacher who is a spouse, parent, church-goer, community worker, etc., will probably experience more work-related stress than one who is single with few social and familial obligations. Simply in terms of the amount of time available to perform the work role, a multiple role incumbent is likely to experience more role overload. Various investigations support the notion that an executive with a supportive wife who does not allow the familial role to impinge on the work role of her husband is more successful and subject to less role stress than an executive whose spouse does not perform this function (Barber, 1976; Beattie, Darlington & Cripps, 1974; Gowler & Legge, 1975; Guest & Williams, 1973; Hardy, 1975, Pahl & Pahl, 1971).

The majority of school teachers in America tend to be females. Females traditionally have been unable to elicit such supportive behavior from their spouses. On the contrary, in addition to performing their own work role, they perform the supportive function for the spouse. This dual role fulfillment among the vast majority of teachers supports the argument that they will experience higher stress than other employee groups.

Occupational status and organizational rank have been frequently discussed as potential sources of work role stress. The professional status of teachers has been the subject of much theory and research. Corwin (1965), for example, noted that the position of educators in America is particularly susceptible to role stress, and that status dilemmas are inherent in "the efforts of teachers to carve out a professional status amidst the growing inroads of complex bureaucracies." (p. 217). Thirty years ago, the status of teachers was determined as falling somewhere among the middle ranking occupations (National Opinion Research Corporation, 1947). In one survey, 11% of the public ranked teaching with labor and service work, when compared in prestige to such acknowledged professions as medicine and law (Terrien, 1953). But teachers' status has fluctuated considerably with changes in the social system, particularly with changes in the status of women and children in society (Corwin, 1965). Despite increases in the functional importance of teachers (and the resulting growth in the numbers of teachers (Fund for the Advancement of Education, 1955)) and the requisite qualifications for teaching (Stinnet, 1952; La Bue, 1960), the elevation of teacher status has been somewhat slow.

In addition to inter-occupational status differences, there are status differences *among* the teachers themselves. Wilson (1962) remarked on the status of a humanities teacher in a technical college: "his subject is thought of--by colleagues and clientele alike--as a trimming, a piece of ministerial whitewash with no significance for the real business of the institution." (p. 28). Similarly, with the growing emphasis on a narrow range of academic goals, teachers of art, woodwork, domestic science, physical education. etc., have sometimes been viewed as 'extras' and as 'instructors' rather than 'educators' (Grace, 1972). Teachers of mathematics. science, foreign languages, etc., on the other hand, enjoy relatively high status within the teaching occupation.

Various studies have attempted to determine the relationship of occupational status to indicators of role stress (perhaps better categorized as role strain). Kasl and French (1962), for example, found a positive correlation between status and self-esteem in a study of two large companies. They hypothesized that "occupants of high status jobs will have a favorable objective public identity, that is, high objective public esteem. Objective public esteem largely determines subjective public esteem, which in turn strongly affects self esteem" (p. 76). Gurin, Veroff, and Feld (1960) found a positive association between occupational status and job satisfaction, while various studies have established a positive relationship between organizational rank and job satisfaction (Katz & Kahn, 1952; Mann & Pelz, 1948; Morse, 1953). Kahn et al. (1964) confirmed a relationship between status and role stress. In a sociological analysis of status inconsistency and marginality, Starr (1977) argued that status inconsistencies are often related to symptoms of strain, including diagnosed mental disorders, social isolation, and the most extreme symptom--suicide. Thus, to the extent that teachers perceive their occupational status to be low, they will experience higher role stress.

2. Organizational Stressors. The second potential source of stress is simply "being in the organization" and the threat to an individual's freedom, autonomy, and identity this poses (Cooper & Marshall, 1978). A

comprehensive study of organizational stressors, however, requires multi-organizational designs which are difficult and expensive, hence rare (Katz & Kahn, 1978). Even within an organizational setting, the sources of stress are not always randomly distributed; rather, they vary systematically among the different roles and different levels or positions in the organizational hierarchy (Parasuraman & Alutto, 1981). In general, however, several organizational stressors can be identified, including organizational structure and process, hierarchical position, and participation in decision-making.

That *structural* variables affect employee attitudes and perceptions has been demonstrated in many studies (Adams, Laker, & Hulin, 1977; Herman, Dunham, & Hulin, 1975; Parasuraman & Alutto, 1981). A program of research by Pugh and his colleagues (Pugh, Hickson, Hinings, & Turner, 1968; Payne & Pugh, 1976) has also attempted a specification of the impact of organizational structure and organizational context on the immediate social and task-related environment of the individual. Organizational *size* has been most comprehensively investigated in this regard. Payne and Pugh (1976) reported substantial associations between organizational size and role differentiation; role differentiation in turn was related to the specificity of role definitions and expectations. The authors also found size to be related to measures of role behavior and strain. Kahn et al. (1964) found an almost linear relationship between organizational size and the degree of experienced role stress. In their summary of the research on organizational structure, Porter and Lawler (1965) indicated that size was associated with job-related behaviors. Thus, it seems reasonable to argue that school size will affect the role experiences of teachers.

Relationships between *hierarchical position* and role experiences have been inconsistent in past research. Hierarchical position is positively related to role and organizational perceptions (Gorman & Malloy, 1972; Payne & Mansfield, 1973; Schneider, 1972), but since the reward systems are also superior in the higher hierarchical positions, the results are difficult to interpret. Kahn et al. (1964) reported that maximum conflict is experienced at the upper middle managerial echelons, and that direct and indirect supervisory responsibilities are positively related to experienced role stress. To the extent that teachers are viewed as being located in the middle levels of the school hierarchy, they will experience greater role stress.

Pugh et al. (1968) indicate that three aspects of operational features form an overall dimension labeled "structuring of activities." These are: 1) *specialization*, the degree to which tasks and duties are subdivided within the organization; 2) *standardization*, the degree to which procedures and rules for carrying out tasks are specified; and (3) *formalization*, the degree to which procedures and rules exist in a written form. Hickson (1966) summarized a number of studies indicating that specificity of role prescriptions reduces confusion, is more motivating, but results in greater anxiety and power conflict. Negative relationships between formalization and role ambiguity (but not role conflict) were also reported by Rogers and Molnar (1976). From a review of the research, Porter, Lawler and Hackman (1975) concluded that there is no ideal "structuring of activities," and that the requisite structure should partly depend on the situational factors. Along similar lines, Schuler (1977) reported that structure, technology, and task characteristics interacted in the resultant levels of role conflict and ambiguity. Moch, Bartunek, and Brass (1979) also found significant structure-stress correlations. Structuring of activities may result in greater role clarity; it could also produce higher levels of role underload, in that the role expectations are too easy. In other words, the presence of rigid structures can be a source of greater or lesser role stress.

The bureaucratic structure of the school has been investigated frequently as a potential source of teacher attitudes. For example, Moeller and Charters (1966) found a significant positive relationship between the bureaucratic structure of the school system and teacher sense of power. Similar findings were also reported by Isherwood and Hoy (1973), Hoy, Newland and Blazovsky (1977), and Nirenberg (1977).

Multiple authority structures are also potential sources of role stress. Several studies have shown that the presence of multiple authorities or "bosses" disrupts an individual's orientation to the organization and the profession by forcing him/her to choose among these "bosses" (Etzioni, 1959; Evans, 1962; Gouldner, 1958; Kaplan, 1959; La Porte, 1965). Zawachi (1963) found that role conflict results from dual hierarchies in hospitals. Similar results have been reported by Frank (1958), Ditz (1959), and Ben-David (1958). Thus, the extent that teachers have multiple role senders, they will experience greater stress.

A potential source of organizational stress frequently examined in educational and non-educational settings is *participation in decision-making*. Coch and French (1948) were among the first to examine the effects of participation in decision-making on individuals. French and Caplan (1970) found participation to be associated with lower job-related strain. Buck (1972) reported that participation was related to stress among both managers and lower-level workers, while the research of Margolis, Kroes, and Quinn (1974) showed that this phenomenon was the most consistent predictor of role stress in a national sample of workers. Teas, Wacker, and Hughes (1979) also found participation in decision-making to cause role clarity among salesmen. In addition to the profusion of work done in industrial settings, some research indicates that participation in decision-making is related specifically to the role stress of teachers. For instance, Mohrman, Cooke, and Mohrman (1978) found participation in the technical domain to be negatively related to role ambiguity in a sample of 460 teachers from 22 schools. In a similar vein, Oliver and Brief (1977-78) reported that job control was negatively related to role conflict and role ambiguity. A study by Ivancevich (1979) demonstrated that too much participation, as well as too little participation (decisional saturation *and* deprivation) were associated with stress. Thus, participation, as well as the amount of participation, is important as an antecedent of role stress. In short, organizational size, structure, chains of command, and decisional delegation may all be potential stressors for teachers.

3. Interpersonal Stressors. Interpersonal forces can be significant stressors. For instance, Miles (1977) reported that the role-set configuration was an important predictor of some types of role conflict and role ambiguity. Three sets of interpersonal stressors can be identified within an organizational context: supervisors, peers, and subordinates. In the case of teachers, students are special subgroups of interpersonal stressors.

From a review of research in the preceding twenty-five years, Blocker and Richardson (1963) concluded that *the administrator* was the key figure in teachers' attitudes about the job. The quality of the administrative relationships and the quality of leadership within the school system was of paramount importance (Sergiovanni, 1967; Grassie and Carss, 1972). Bedeian, Armnekis, and Curran (1981) reported significant relationships between role conflict and role ambiguity on the one hand and supervisory support, supervisory goal emphasis, supervisory work facilitation, and supervisory interaction facilitation on the other. The importance of the relationship with superiors as a source of role stress has been emphasized also in research done with managers and workers in other settings (e.g., Buck, 1972; French & Caplan, 1970; Kahn et al., 1964; Walker, Churchill, & Ford, 1975).

Relationship with peers is another interpersonal stressor. Besides the obvious factors of office politics and colleagues' rivalry, another aspect of peer relationships may be stressful. Stress may result from a lack of adequate peer support in difficult social situations (Lazarus, 1966). Bedeian et al. (1981), Morris (1975), and Minzberg (1973), among others, have emphasized the relevance of peer relationships and social support in the stress experiences of employees. With teachers as with other employees, peers (i.e., the other teachers in the school) tend to be a major source of role expectations and role information; thus, they are potential sources of high or low role stress.

Relationships with subordinates are the third set of interpersonal stressors. For instance, Miles (1975) found personnel supervision to be a critical source of stress among R&D professionals.

Officially, a critical aspect of the teacher's role is the supervision of others' (i.e., students') work. Jackson (1968) argued that the pressure of numbers and time force the teacher to fulfill the roles of traffic cop, judge, supply sergeant, and timekeeper, as well as the traditional role of imparting instruction. The teacher is a key factor in the development of the social climate of the classroom. Despite the development of the "open" school, the basic relationship between teachers and students is one of dominance and submission (Stub, 1975). Although the dominant force is the teacher, however, he/she cannot *control* the social climate of the classroom, merely influence it. Every class is comprised of students who differ along a variety of dimensions. Given the variety among students, the fact that students epitomize the essence of teaching, and the multiple roles the teacher adopts in relation to students, it is easy to regard the relationship between the teacher and the student as an interpersonal source of stress. Lortie (1975) noted that "other sources of satisfaction...pale in comparison with teachers' exchanges with students...We would therefore expect that much of a teacher's work motivation will rotate around the conduct of daily tasks--the actual instruction of students." (p. 104).

Thus, the nature of the relationships a teacher has with school administrators, with other teachers, and with his/her students will determine, in large measure, the extent to which his/her work life is stressful.

4. Job-Related Stressors. These stressors characterize the job per se that the employee is performing. In the case of teachers, job-related stressors reside in the actual classroom duties, as well as the other activities that formally or informally, constitute the job description. Several potent job stressors can be identified, including responsibility for others, job variety, task completeness, noise, and the physical job conditions.

Responsibility for other people, as opposed to responsibility for things, has been considered a major job related stressor (French & Caplan, 1970; Pincherle, 1972; Terhune, 1963; Wardwell, Hyman, & Bahnson, 1964). In an examination of 148 department chairmen, Carroll (1974) found that decisions affecting the well-being and professional status of department personnel were the highest source of role conflict. Likewise, Gavin and Axelrod (1977) found responsibility for others to be related to many stresses--role conflict, role ambiguity, quantitative work load, and job pressures. A major role expectation for teachers tends to be responsibility for students. To the extent that the teachers' received role encompasses responsibility for students, they should experience greater stress.

The fit between the individual and the job demand constitutes the essence of role stress. It is surprising, therefore, that little attention has been devoted to a systematic elucidation of job characteristics that may be potential stressors. Several job-related sources of stress can be identified intuitively, however. *Variety* is the number of different tasks that an individual performs as part of the job (Hackman & Lawler, 1971). The different tasks that may constitute a teacher's job were discussed earlier. These multiple role expectations may lead to role conflict, role overload, role insufficiency and, perhaps, role ambiguity. Job variety can therefore by hypothesized to be a relevant source of stress, although Walsh, Taber, and Beehr (1980) found the correlations between role clarity and variety to be insignificant. *Task completeness*, the extent to which an individual finishes an entire product or does a whole piece of work (Hackman & Oldham, 1976), is another potential source of stress. Role ambiguity and task identity were found to be significantly related in a study by Walsh et al. (1980). With respect to the teacher's role, Neill (1939) remarked that "most teachers have a more or less vague feeling that their work is pouring water down a drain...because he has a job that never finishes, a job in which he can see no end." Such feelings can lead to various kinds of stress, including role ambiguity and role underload. *Feedback*, or knowledge of results, is a further potential source of stress. For instance, Teas et al. (1979) found performance feedback related to role clarity among salespeople. Similar results for both task and supervisory feedback were reported by Walsh et al. (1980), although a study by Moch et al. (1979) found only a few significant relationships in this regard. Wilson (1962) discussed the stress inherent in the teacher's job because there are no clear lines of demarcation to inform the focal person when he/she has finished his/her job. The definition of a "good" teacher does not rest with the examination-passing ability of students. It encompasses the moral, social, and psychological development of students as well. Given the wide variety of viable criteria for excellence, the teacher is hard pressed to assess the quality of his/her work or the inherent role expectations. A higher degree of stress under these conditions is not surprising.

These and similar job characteristics may enhance the level of stress experienced by teachers.

5. Intrapersonal Stressors. A variety of individual sources of stress have been proposed. These sources of stress can be classified under two general categories: personality variables and biographical variables.

Among the *personality* variables that have been investigated as potential stressors are *Type-A personality*, characterized by attributes such as hard-driving effort, striving for achievement, aggressiveness, haste, impatience, etc. (Jenkins, Zyzanski & Rosenman, 1971). Much research has established that Type-A behavior is related to symptoms of strain such as coronary heart disease (Brand, Rosenman, Sholtz, & Friedman, 1976; Friedman & Rosenman, 1959; Rosenman, Brand, Jenkins, Friedman, Strauss, & Wurm, 1975; Rosenman & Friedman, 1961), although this research is primarily focused on industrial samples of workers. Caplan et al. (1975) did find, however, that administrative professors and family physicians scored highest on the Type-A scale, and Keenan and McBain (1979) found Type-A behavior to be related to experienced role overload.

Sarbin and various colleagues (summarized in Sarbin & Allen, 1968) found a variety of personality characteristics including neuroticism, authoritarianism, rigidity, and schizophrenia, to be related to role-taking ability. Because the present study focused on "normal" populations, and because the teaching job necessitates constant interaction with people, *authoritarianism* and *rigidity* were considered the most relevant intrapersonal stressors.

Value orientations are another aspect of an individual's personality that may be potentially stress-producing. For instance, Corwin (1965) argued that the local versus cosmopolitan dimension of value orientations is critical in a teacher's work life. Musgrove and Taylor (1965) also provided evidence that the moral orientation of the teacher's role is still strong, and that greater weight is given to moral orientation than any other factor (subject instruction, social training, etc.) by most grammar school teachers. Likewise, Grace (1972) hypothesized that teachers with strong moral orientations would experience stress because of conflicts with the wider cultural tendencies. Kahn et al. (1964) argued that it is not merely the normative climate of an organization, but also deviance from the normative climate, that is potentially stress-producing. Overall, then, the deviance of teachers from the normative climate of their schools is likely to be stressful.

In addition to personality variables, many *demographic/background* characteristics have also been related to role stress, either directly or indirectly. *Age* is a variable that has been frequently explored in this regard. For example, Spindler (1963) argued that older teachers would be more subject to role conflict, partly because of the increasing age gap between teachers and students. *Gender* has also been considered important in this context. For instance, Tung (1980) found that female school administrators experienced substantially lower levels of self-perceived occupational stress than their male counterparts. Paul (1975) reported that the relationship between role stress on the one hand and role strain and withdrawal on the other tended to be different for men than for women. Other variables of interest are *tenure, socioeconomic status*, and *race*, although little systematic attention has been focused on these variables. In terms of the value structures and the expectations that individuals bring to the work setting, however, these variables are relevant as potential stressors.

In short, the intrapersonal variables that are likely to be potent stressors for teachers include authoritarianism, rigidity, Type-A personality, value orientations, age, gender, tenure, and other background characteristics.

Summary. Five stressor groups were discussed in the foregoing section.

Varying amounts of research evidence exist about the potency of these stressors. In most cases, however, it is reasonable to assume that environmental, organizational, interpersonal, job-related, and intrapersonal characteristics will have an impact on the degree of stress experienced by teachers.

Role Stress and Role Strain

In this section, the relationships between the different stresses and the physiological, psychological, and behavioral strain symptoms is discussed. The section is organized around specific role stresses. That is, the relationship of role conflict to different strains is discussed next, and so on. As mentioned earlier, the focus here is on the *subjective* experience of role stress as the immediate precursor of role strain.

Role Conflict. This stress was defined earlier as a threat to the focal person in the form of incompatible role demands. Role conflict is one of the most popularly studied stresses, and the evidence is consistent regarding the relationship between role conflict and role strain.

In a stratified random sample of 318 males in 23 different occupations, Caplan et al. (1975) found that role conflict was the stress most strongly related with measures of irritation and somatic complaints; role conflict was also related consistently with anxiety and depression. Kahn et al. (1964) found that role conflict was associated with job dissatisfaction and job-related tension and that this effect was moderated by the power and authority of role senders. French and Caplan (1970) reported that the mean heart rate of 22 NASA employees over a two-hour period was strongly related to their reported role conflict. In a medically sophisticated study of 762 male kibbutz members, Shirom, Eden, Silberwasser, & Kellerman

(1973) found a significant relationship between role conflict and coronary heart disease, but only for white collar workers. The data indicated further that the less physical exertion required by the job, the stronger the relationship between role stress and strain. Similarly, Margolis and Kroes (1974) found that foremen (who have high role conflict-prone jobs) are seven times as likely to develop ulcers as shopfloor workers. A simulation study by Manning, Ismail, and Sherwood (1981) also demonstrated that physiological, affective, and performance measures distinguished between individuals who were and were not exposed to role conflict. Bedeian et al. (1981) reported a significant positive association between role conflict and tension. A positive relationship between role conflict and psychosomatic symptoms was also reported by Morris and Koch (1979).

In a study of role conflict in army schools, Getzels and Guba (1954) found that role conflict was negatively associated with teaching effectiveness. Gross, Mason, and McEachern (1958) found significant negative correlations between perceived role conflict and measures of satisfaction among school superintendents. Rizzo et al. (1970) discovered significant but weak correlations between role conflict and satisfaction, anxiety and propensity to leave the organization. Significant negative relationships between person-role conflict and intrinsic and overall satisfaction were also reported by Johnson and Stinson (1975). Gavin and Axelrod (1977) also reported significant correlations between role conflict and anxiety depression-irritation and work satisfaction. Miles (1976a) reported that role conflict was positively associated with job-related tension and anxiety and negatively related to job satisfaction and interpersonal relations. Likewise, Batlis (1980) found significant relationships between intrasender, intersender, and person-role conflict on the one hand and job satisfaction, job-related anxiety, and propensity to leave on the other. Other studies to discover negative relationships between role conflict and job satisfaction include Abdel-Halim (1978, 1980); Keller (1975); Miles (1975); Oliver and Brief (1977-78); Posner and Randolph (1980); Senatra (1980); Stead and Scamell (1980). On the other hand, Keenan and McBain (1979), found insignificant correlations to exist between role conflict and job satisfaction and tension. Schuler (1975) argued that the organizational level of employees may moderate the relationship between role conflict and job satisfaction, though Bedeian et al. (1981) reported finding no such moderating effects.

The foregoing discussion indicates that role conflict is related to a number of strained responses that are primarily psychological and physiological in nature. Of course, not all the consequences of role conflict will necessarily be dysfunction to the individual or the organization. Coser (1956) argued that "a flexible society benefits from conflict because such behaviour, by helping to create and modify norms, assures its continuance under unchanged conditions." (p. 154). While some degree of conflict may promote the effective functioning of the individual and the social system, intense conflict "will exact a price, both in terms of individual well-being, and organizational effectiveness" (Kahn et al., 1964, p. 53).

In summary, role conflict appears to have a consistent impact on the physiological and psychological health of employees.

Role Ambiguity. Role ambiguity has been related to the job dissatisfaction of workers in a number of organizational settings: managers

(Abdel-Halim, 1978; Gavin & Axelrod, 1977; Kahn et al., 1964); NASA scientists, administrators, and engineers (French & Caplan, 1973); employees of research and development organizations (House & Rizzo, 1972; Keller, 1975; Miles, 1975; Rizzo et al., 1970); Catholic priests (Potvin, 1976); nurses (Lyons, 1971; Posner & Randolph, 1980); graduate students (Baird, 1969); military and civil service personnel (Johnson & Stinson, 1975); engineers and accountants (Burke, 1976; Ivancevich, 1980; Senatra, 1980); respiratory therapists (Posner & Randolph, 1980); production workers (Breaugh, 1980; Walsh et al., 1980); professional librarians (Stead & Scamell, 1980); retail sales managers (Oliver & Brief, 1977-78); and electronics employees (Valenzi & Dessler, 1978). Schuler (1975) found the relationship between role ambiguity and satisfaction to be moderated by job level among manufacturing employees, although a study by Bedeian et al. (1981) indicated otherwise.

In addition to job dissatisfaction, role ambiguity has been found to be related to a number of psychological and physiological strains. These include depression (Beehr, 1975; French & Caplan, 1973), anxiety-tension (Abdel-Halim, 1978; Bedeian et al., 1981; Caplan & Jones, 1974; Cohen, 1959; Gavin & Axelrod, 1977; Kahn et al., 1964; Lyons, 1971; Rizzo et al., 1970; Wispe & Thayer, 1957), low self-esteem (Beehr, 1976; Kahn et al., 1964), boredom (Caplan et al., 1975), fatigue (Beehr, 1976; Rizzo et al., 1970), and life satisfaction (Beehr, 1976). French and Caplan (1970) found role ambiguity to be related to increased blood pressure and pulse rate, while Margolis et al. (1974) and Morris and Koch (1979) discovered a relationship between role ambiguity and a number of symptoms of physical and mental ill-health.

Van Dijkhuizen and Reiche (1980) also found significant correlations between role ambiguity and job-related threat, job dissatisfaction, psychosomatic and psychic complaints, smoking, cholesterol levels, and blood pressure, although role ambiguity was only insignificantly related to self-esteem, heart rate, and obesity. Keenan and McBain (1979) reported significant relationships between role ambiguity and job satisfaction and work-related tension.

With respect to the teacher's role, D.H. Lawrence remarked that "you never know what you have done or if you have really done anything." Several other writers (e.g., Grace, 1972; Wilson, 1962) also commented on the diffuseness of the teacher's role. Peterson (1964) found this diffuseness to be a significant problem for female teachers in American high schools. On the other hand, Gerstl (1967) considered any stress stemming from role diffuseness to be an unlikely source of strain, while Miles (1969) found that teachers and principals almost unanimously rejected the notion that their roles were diffuse. The infrequent evidence to the contrary notwithstanding, role ambiguity *is* likely to be a source of strain for teachers, just as it is for most other employee groups.

Role Overload. Two kinds of role overload were distinguished earlier: quantitative and qualitative overload. In general, both kinds of role overload have been associated with strain symptoms. Harrison (1976) noted that the relationship between overload and dissatisfaction was consistent across several occupations (administrator, assembly line worker, police officer). Abdel-Halim (1978) reported a significant relationship between role overload and anxiety, and Beehr (1974) demonstrated that role overload was associated with a number of strains, viz., job dissatisfaction, life dissatisfaction, low self-esteem, depression, and fatigue (somatic complaints were the only strain indicators not related to overload in this study). Kafry and Pines (1980) found role overload to be related to the experience of boredom, while Caplan et al. (1975) found work load to be related to dissatisfaction, and Caplan and Jones (1975) reported that this stress was associated with anxiety. Meier (1961) generalized about the organizational effects of role overload as follows: "overload causes the destruction of relations more rapidly than can be rebuilt through experience and instruction" (p. 56). Caplan (1971) found both subjective and objective measures of role overload to relate to heart rate and serum cholesterol levels among employees in a government agency. In a similar vein, Van Dijkhuizen and Reiche (1980) found significant relationships between overload and job-related threat, job dissatisfaction, psychosomatic symptoms, psychic complaints, self-esteem, smoking, blood pressure, and obesity. Keenan and McBain (1979) also reported an association between role overload and work-related tension. The relationship of overload to satisfaction was insignificant, however.

Taking into consideration the distinction between qualitative and quantitative overload, French, Tupper, and Muller (1965) demonstrated that professors were more sensitive to the former, and administrators to the latter, stress; both types of overload were, however, tension-producing. Similarly, French and Caplan (1970) found quantitative overload to be linked to cigarette smoking. Gavin and Axelrod (1977) also demonstrated that variations in work load were related to symptoms of strain; quantitative work load, however, was unrelated to strain measures. Russek and Zohman (1958) found that 25% of young coronary patients had been working on two jobs and an additional 45% held jobs that required working 60 hours or more per week due to quantitative overload. Breslow and Buell's (1960) findings support a relationship between the number of hours worked and coronary heart disease. The work of Margolis et al. (1974) on a representative national sample of workers indicated that overload was related to a variety of symptoms of strain: escapist drinking, lowered self-esteem, low motivation, and absenteeism. Several other studies (e.g, Quinn, Seashore and Mangione, 1971) support the notion that role overload is a significant factor adversely affecting the physical and mental health of the employee. On the other hand, Burke (1976) reported significant correlation between workload and job satisfaction. But the overall research results suggest that both qualitative and quantitative overload are related to at least nine different symptoms of strain: job dissatisfaction, job tension, low self-esteem, threat, embarrassment, high cholesterol levels, increased heart rate, skin resistance and more smoking (French & Caplan, 1973).

In a study of 201 men and women employed in the dual roles of teaching and coaching at the college, secondary, and middle/elementary levels, Locke and Massengale (1978) found role overload to be the most commonly perceived and intensely experienced stress.

It has been noted that a teacher who accepts a variety of different role expectations as being legitimate will be more subject to strain than one who commits himself/herself to only one major role (Bantock, 1969; Grace, 1972; Rugh, 1961). Thus, the teacher who is a socializer, counselor, and liaison between home and school as well as a vehicle for learning will be more strained that one who is primarily a vehicle for learning. Getzels and Guba (1954) suggested that the teacher may have to commit herself/herself to a major role "in order to determine his action at choice points." (p.173).

Role Underload. This stress refers to role expectations that do not make use of one's particular skills and abilities, including those an individual may have developed in vocational training or as part of academic studies (Caplan et al., 1975). French and Caplan (1973) found this stress to be related to two role strains--job satisfaction and job-related threat. Beehr (1974) found role underload to be related to job dissatisfaction, low self-esteem, depression, and fatigue. Similarly, Gavin and Axelrod (1977) found significant relationships between this stress and anxiety-depression, irritation, work satisfaction, and psychosomatic symptoms. Kafry and Pines (1980) also reported a significant association between role underload and boredom. Caplan et al. (1975) found underload to be related to boredom and job dissatisfaction, and cautioned that role underload may be particularly serious stress in view of its high association with many indicators of strain.

Little systematic work has been done regarding the extent to which teachers' skills and abilities are underused. Reflecting on why able public school teachers leave the profession, however, Jewett (1957) concluded that "they have discovered that very few people in their school evaluate them professionally on the basis of their ability to promote learning" and that "they are blocked in realizing their purpose (i.e., to teach) by working conditions existing in the public schools." It seems apparent from these remarks that school teachers may not be able to use their relevant skills and abilities and, as a consequence, may suffer role strain.

Role Insufficiency. This variable has been examined only infrequently as a role stress, although there is some research indicating that role insufficiency is related to role strain. By far the most common association is with job dissatisfaction (Barnowe, Mangione, & Quinn, 1971; Cammann, Quinn, Beehr, & Gupta, 1977; Gupta, 1981). In addition, there is sporadic research indicating a relationship between role insufficiency and depression and self-esteem (Cammann et al., 1977).

Little research has focused on the extent of role insufficiency experienced by teachers. It seems reasonable to argue, however, that school teachers do not have access to the materials, equipment, etc., that they need to do their jobs well. As a consequence, they would experience role insufficiency and be strained.

Summary. The theoretical and empirical literature (summarized in Beehr & Newman, 1978; Schuler, 1980; Van Sell et al., 1981) provides ample evidence of the deleterious effects of role stress on the physical and mental well-being of employees. Although the most consistent relationship have been established between the various role stresses and job dissatisfaction, a variety of other behavioral, physiological, and psychological symptoms of role strain can also be highlighted. These include depression, anxiety-tension, lowered self-esteem, fatigue, boredom, heart/pulse rate, levels of serum cholesterol, and coronary heart disease. Unfortunately, no systematic efforts have attempted to disentangle the extent to which specific stresses are related to specific strains. Nor have researchers tried to establish the degree to which a specific stress is uniquely associated with all the symptoms of strain. The present research represents a beginning toward the resolution of these unexplored issues with respect to a specific employee population, junior high school teachers.

Role Stress and Withdrawal

In addition to the symptoms of strain, role stress has also been associated with withdrawal behaviors on the part of the employee. The rationale for expecting stress and withdrawal to be related to each other is fairly simple. Role stress produces, to a greater or lesser extent, aversive conditions in the organizational environment. Finding himself/herself in a noxious environment, the employee must adapt to it in the best way possible. Atkinson (1964), Gupta and Jenkins (1980), and Orpen (1979), among others, pointed out the people have a strong tendency to avoid punishing situations. Thus, an ideal coping mechanism is to remove oneself, physically or psychologically, from the punishing situation, viz., to withdraw. In other words, role stress is hypothesized to be related to voluntary withdrawal behaviors.

Many forms of employee withdrawal can be identified. Particularly dysfunctional from an organizational standpoint are three forms of behavioral withdrawal, viz., tardiness, absenteeism, and turnover. In addition, the employee may also opt for psychological withdrawal, i. e., estrangement from the organization. The relationship between role stress and these withdrawal forms, as demonstrated in previous research, is discussed in this section.

Estrangement. Relatively few studies have examined the relationship between role stress and estrangement. But one study (Hrebiniak & Alutto, 1972) highlighted the importance of role-related factors, such as role tension, in determining the estrangement levels of nurses and elementary and secondary school teachers. Abdel-Halim (1980) also found a negative relationship between role ambiguity and job involvement. Likewise, Morris and Koch (1979) found role conflict and role ambiguity to bear some relationship with organizational commitment and job involvement (both variables can be subsumed under the rubic of estrangement). In a somewhat different vein, the work of Greene (1978) indicated that role stress and estrangement were similarly affected by outside variables, such as professional/organizational identification and formalization.

Clearly, research supporting a strong relationship between estrangement and role stress is sparse. From a theoretical standpoint, however, it is reasonable to expect that role stress will be positively associated with the experience of estrangement.

Tardiness. No empirical research has examined the extent to which role stress is related to tardiness behaviors among employees. One purpose of this study, therefore, is to explore whether role stress leads to lateness among the teachers in the sample.

Absenteeism. Unlike the previous two withdrawal manifestations, absenteeism has been the subject of some role stress research. For example, Gupta and Beehr (1979) found role ambiguity, role overload, role underload, and role insufficiency to be related to absenteeism (role conflict was not studied in this research). Hedges (1973) also reported higher levels of absenteeism in jobs that were characterized by role stress. Similarly, Douglas (1977) discovered that role conflict was a predictor of absenteeism among 154 teachers in public and parochial schools. On the other hand, Redick (1973) could not detect a relationship between role conflict and absenteeism among counselors from elementary, secondary, junior, and senior high schools. Overall, the results point toward a strong positive relationship between stress and absenteeism. Steers and Phodes (1978) concurred with this conclusion, arguing that, to the extent that role stress exists in the work environment, people will be less motivated to come to work and may, indeed, look for excuses not to be present at work.

Turnover. This variable is by far the most researched as a potential consequence of work-related stress. For example, role conflict and role ambiguity have been found consistently predictive of turnover (Bedeian et al., 1981; Hamner & Tosi, 1974; Paul, 1974; Rizzo et al., 1970; Tosi & Sims, 1977). Other research has related turnover to role conflict (Batlis, 1980; Johnson, 1973; Johnson & Graen, 1973), role ambiguity (Abdel-Halim, 1980; Lyons, 1971; Orpen, 1977; Paul, 1975), role underload (Hellreigel & White, 1973), and role assimilation/orientation (Graen & Ginsburgh, 1977; Orris, 1972). Gupta and Beehr (1979) reported positive correlations between role ambiguity, role overload, role underload, and role insufficiency on the one hand and the intention to turn over on the other hand; role underload, however, was the only stress related to actual voluntary turnover. Overall, the evidence is fairly conclusive that role stress is positively related to employee turnover.

Summary. There is a dearth of empirical evidence supporting a positive association between role stress and estrangement and tardiness. Many studies indicate, however, that role stress is directly associated with absenteeism and turnover. Theoretical reasons, coupled with extrapolations from the absenteeism/turnover research, therefore, support the notion that role stress is an antecedent of withdrawal attitudes and behaviors.

Recapitulation

In this chapter, it was proposed that role theory be used to examine the work-related experiences of teachers. Five forms of role stress were identified, viz., role conflict, role ambiguity, role overload, role underload, and role insufficiency. The environmental, organizational, interpersonal, job-related, and intrapersonal precursors of role stress were examined. The consequences of role stress (termed role strain) were explored in terms of the behavioral, psychological, and physiological symptoms of strain. Finally, the relationship between role stress and employee withdrawal behaviors was investigated. The research indicates, overall, that role stress is directly related to strain symptoms and withdrawal attitudes and behaviors.

Chapter III

CONCEPTUAL FRAMEWORK FOR TEACHERS

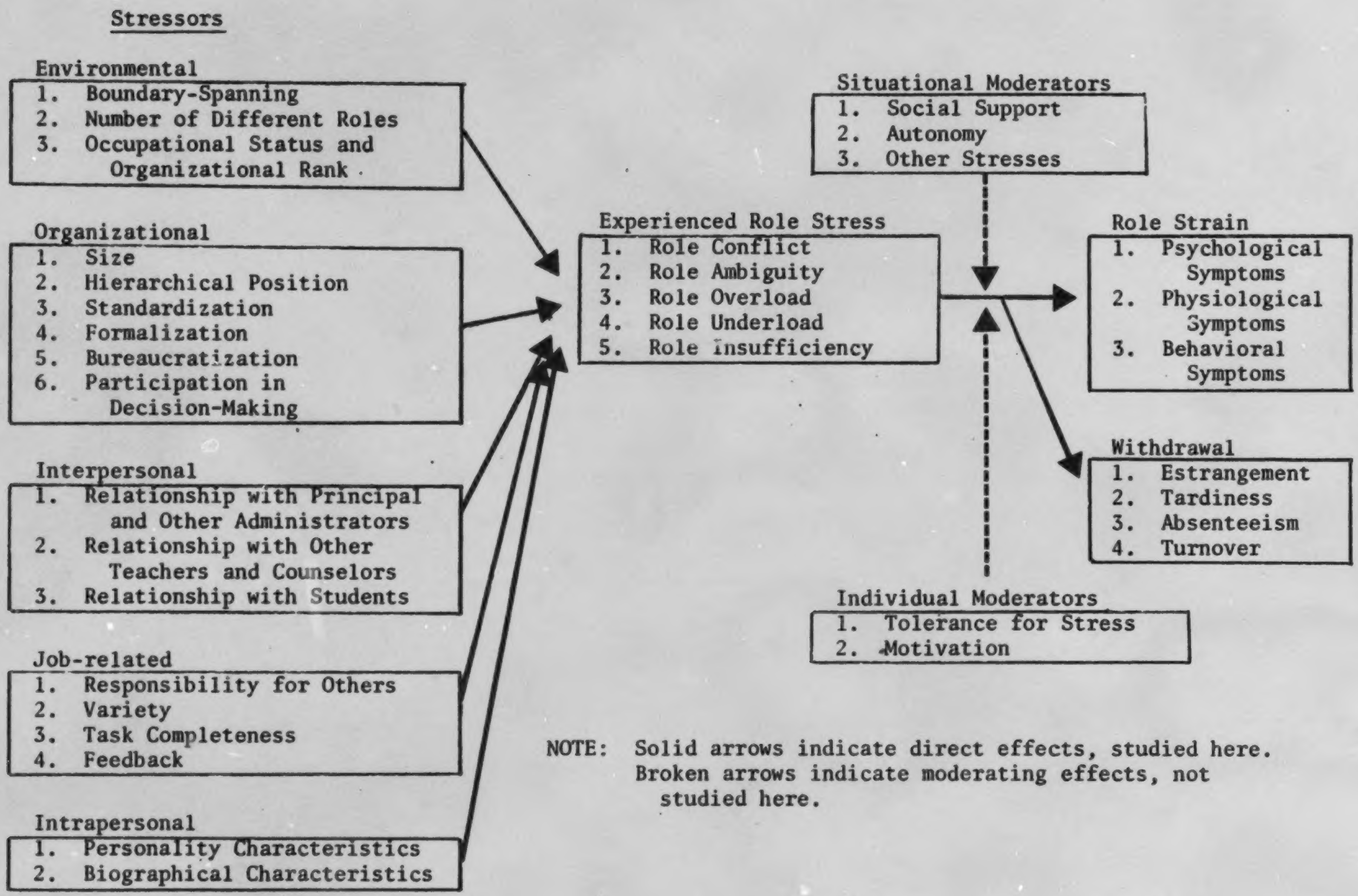
In Chapter II, five sets of stressors were identified that may determine the experience of stress among teachers. These include environmental, organizational, interpersonal, job-related, and intrapersonal stressors. The specific stresses of relevance were role conflict, role ambiguity, role overload, role underload, and role insufficiency. Role stress, in turn, was hypothesized to result in a variety of symptoms of strain, generally subsumed under three broad headings, viz., psychological, physiological, and behavioral symptoms of strain. Finally, it was argued that role stress would result in the manifestation of withdrawal attitudes and behaviors among employees. These theoretical relationships are presented graphically in Figure III.1.

In this chapter, the conceptual framework is elucidated specifically with respect to teachers. The different role stresses, role strains, and withdrawal manifestations are not discussed here, because they operate in work organizations presumably without reference to the specific setting. That is, given the presence of certain levels of stressors, it is assumed that teachers will experience the same stresses, strains, and withdrawal tendencies as assembly line workers and corporate executives. The specific *sources* of stress may, however, vary from one organizational setting to anothers, and it is these stressors that are discussed in greater detail here.

The arguments presented in this chapter draw heavily from the relevant research presented in Chapter II. This research is not repeated here. Many specific propositions are extrapolations from these data, and some are conjectural in nature.

Figure III.1

General Conceptual Framework for Work Role Experiences


Stressors
Environmental
1. Boundary-Spanning
2. Number of Different Roles
3. Occupational Status and Organizational Rank
Organizational
1. Size
2. Hierarchical Position
3. Standardization
4. Formalization
5. Bureaucratization
6. Participation in Decision-Making
Interpersonal
1. Relationship with Principal and Other Administrators
2. Relationship with Other Teachers and Counselors
3. Relationship with Students
Job-related
1. Responsibility for Others
2. Variety
3. Task Completeness
4. Feedback
Intrapersonal
1. Personality Characteristics
2. Biographical Characteristics
Experienced Role Stress
1. Role Conflict
2. Role Ambiguity
3. Role Overload
4. Role Underload
5. Role Insufficiency
Situational Moderators
1. Social Support
2. Autonomy
3. Other Stresses
Role Strain
1. Psychological Symptoms
2. Physiological Symptoms
3. Behavioral Symptoms
Withdrawal
1. Estrangement
2. Tardiness
3. Absenteeism
4. Turnover
Individual Moderators
1. Tolerance for Stress
2. Motivation

NOTE: Solid arrows indicate direct effects, studied here. Broken arrows indicate moderating effects, not studied here.

Environmental Stressors

Three environmental stressors were identified earlier, viz., boundary-spanning, number of different roles, and occupational status. With respect to *boundary-spanning*, it was noted earlier that teachers are subject to role expectations from a variety of extra-organizational sources, including parents, school board members, the community at large, etc. Specifically, although these groups probably exert similar pressures on all teachers, some teachers may feel these pressures to be stronger than do others. The extent to which teachers perceive their role expectations as stemming from multiple intra- and extra-organizational sources should, therefore, be related to the role stress they experience. The visibility of the boundary-spanning role may also intensify its stressful potential. Boundary-spanning activities are particularly likely to increase experienced conflict and ambiguity.

The *different roles* that teachers can adopt in their total life include those of spouse, parent, church-goer, volunteer worker, social/political activist, sports fan, etc. It is expected that the greater the number of roles that teachers occupy, the greater the demands placed upon them, and the greater stress they will experience. In particular, this stressor is likely to be related to quantitative role overload.

Different individuals may hold different opinions about the *occupational status* of teachers. What is relevant in the present context is the extent to which teachers perceive others to hold their status as teachers in high regard. In addition, the intra-occupational status of teachers may be operationalized as their subject or speciality areas. Teachers of speciality areas considered central to the goals of the school--educational goals, athletic goals, etc.--should experience less stress than teachers of more marginal subject areas. Occupational status is hypothesized to be particularly related to role underload among teachers.

These three stressors were considered of greatest theoretical salience for teachers in junior high schools. Exploration of the potency of these and other extra-organizational stressors was one of the main objectives of the present study.

Organizational Stressors

The organizational stressors identified as significant from the previous literature include size, hierarchical position, structural characteristics, and participation in decision-making.

Organizational *size* is a rather complex phenomenon subject to a variety of definitions (Gupta, 1980). At least three aspects of size may be relevant stressors for teachers, including the total number of students in the school, the teacher/student ratio, and the number of students for whom the teacher considers himself/herself responsible. Although the first two measures of size are organizational constants, the third (number of students for whom the teacher is responsible) should vary within schools.

Mixed results have been obtained in the past in identifying *hierarchical position* as a stressor, although some evidence *does* suggest that middle management positions are particularly susceptible to stress. Teachers often constitute the interface between school administration on the one hand and students on the other. Being "in the middle" is the crux of the middle management's stress-proneness, as noted in Chapter II. The degree to which teachers are expected to serve as liaisons between students and administration will, therefore, form another potential stressor in the present context.

Organizational *structural* characteristics are generally constant within organization. Thus, these characteristics are not expected to vary within school. These phenomena can, however, vary across schools. The emphasis in the present study is primarily on inter-organizational variations in structural characteristics, and their impact on role stress. At least three structural characteristics were considered relevant--standardization, or the degree to which issues such as curricula, criteria for admissions, disciplinary procedures, etc., are spelled out and adhered to; formalization, or the degree to which rules and regulations with reference to these issues exist in writing; and bureaucratization, or the degree to which rules and regulations are rampant in the school environment.

No specific and directional predictions are made in the present research with respect to the foregoing organizational characteristics, i.e., with respect to size, hierarchical position, and structural properties. It is expected, however, that the different stresses will be significantly related to these organizational stressors. One purpose of the present study, therefore, is to delimit the nature and direction of the relationships between organizational stressors and role stress.

Participation in decision-making in the school system can be examined with respect to three decision-making domains--instruction, management, and negotiation (Mohrman et al., 1978). The extent to which teachers perceive themselves as having input into each of these domains--in deciding upon curricula, in influencing the overall objectives of the school, and in dealing with problems and issues--can be a potential stressor. It should be noted that the relationship in this case is expected to be inverse, i.e., *lack* of participation is hypothesized to be the potential stressor.

Participation is expected to be related to all five stresses of relevance in the present study.

Thus, four sets of organizational characteristics (size, hierarchical position, structural properties, and participation in decision-making) are hypothesized to affect the extent to which teachers feel role stress. It is expected that other organizational stressors may be identified empirically through the course of the research.

Interpersonal Stressors

Three sets of interpersonal stressors were identified earlier. These were supervisors, peers, and subordinates.

The *school principal* is likely to be the most important person in the supervisory network of the teacher. Characteristics of the school principal, such as rigid adherence to rules, interpersonal style, bureaucratic orientation, supportiveness, friendliness, etc., may exacerbate or ameliorate the extent to which the role experiences of teachers are stressful. Other administrators, such as assistant principals, etc., may also constitute sources of stress to teachers by the clarity with which they communicate role expectations, the consistency of these role expectations, the number of different expectations communicated, etc.

The relevant peers for teachers are the *other teachers and counselors* in the school. These peers can be the clearest reference group that teachers have in the school environment. Other teachers/counselors can help in reducing the experience of role stress, or they can enhance it. They form a part of the teacher's role set, and they can define the nature of the role expectations and experiences of the teacher by their attitudes and actions.

Students are not the subordinates of teachers in the industrial sense of the term, but they *are* under the teacher's authority. Characteristics of students, such as their motivation to learn, their classroom behaviors, their socioemotional maturity, can all have a significant impact on the classroom and school experiences of teachers.

Recently, much evidence has come to light to suggest that the relationships that teachers have with students define the most potent source of stress for them, outweighing by far all other sources of stress combined. Special issues with reference to the relationships with students include the extent to which students recognize the teacher's authority in class, the extent to which discipline becomes a problem for teachers, and the extent to which students have respect for their teachers. Thus, the characteristics of the students with which teachers deal on an ongoing basis are considered of prime importance in defining the level of stress experienced by teachers.

Interpersonal variables, including the principal and other administrators, other teachers and counselors, and the students, are expected to be one of the most potent sources of stress for teachers.

Job-related Stressors

Job-related stressors identified as salient in the previous literature include responsibility for others, variety, task completeness, and feedback.

In the case of teachers, *responsibility for others* refers primarily to responsibility for students. The extent to which teachers feel responsible for the "whole" student--for social and emotional needs, for capacity to learn, etc., in addition to merely the instructional aspects of the student's development--can be stressful for them, and likely to be related to role conflict, role ambiguity, qualitative and quantitative role overload and, perhaps, role insufficiency.

Task completeness is a related concept. The teacher who feels responsible for the "whole" student may have more trouble differentiating his/her role from that of the parents, for example. Thus, a teacher who feels that his/her job is never done is likely to experience greater stress than one who leaves the job behind in the school building at the end of the day. Task completeness and responsibility for others are expected to relate to the same role stresses.

Variety in the teacher's job can occur in two ways. First, in-class variety occurs when teachers adopt many different roles in the classroom, including the roles of friend, instructor, counselor, etc. Instructional variety, on the other hand, refers to the number of different subject areas that the teacher is likely to be responsible for. Both types of variety will be related to the experience of stress--the relationship of variety with such stresses as role conflict and role ambiguity is likely to be direct; at the same time, variety may also be inversely related to role underload.

Finally, *feedback* can be obtained from two sources. Task feedback results when the activities involved in teaching (classroom interactions, grading, etc.) are themselves sources of information about how well teachers are doing their jobs. External feedback results when others independent of the task--the school principal, other teachers, students, parents, etc.--provide information to teachers about the adequacy of their role performance. Both types of feedback are expected to bear an inverse relationship with such role stresses as role ambiguity and role insufficiency.

In summary, many characteristics of the job are likely to be related to the experience of stress among teachers. These include responsibility for others, variety, task completeness, and task/external feedback.

Intrapersonal Stressors

Two categories of intrapersonal stressors are salient for teachers, viz., personality variables and background/demographic variables.

Personality variables discussed in Chapter II include Type-A personality, authoritarianism, rigidity, and value orientations. Of these, only the last needs specific discussion with respect to teachers and schools. It was mentioned earlier that *deviance from the normative climate* of a school can be stressful. This deviance can take two forms--that of excessive conservatism in a liberal school environment, and that of excessive liberalism in a conservative school climate. Both kinds of deviance are expected to be stressful, although the manifestations of the stress may be different. In both cases, however, some degree of role conflict is expected to occur. It should be emphasized here that it is *deviance*, rather than the specific value orientations, that is expected to be stressful.

Biographical characteristics discussed in Chapter II include age, tenure, socioeconomic status, sex, and race. With respect to each, it should be recognized that it is not the biographical characteristic per se, but rather the interrelated network of attitudes, experiences, aspirations, achievements, etc., that each embodies that is the ultimate stressor. For example, age in and of itself is not stressful. But age brings with it a certain degree of experience, attitudes toward the world in general and teaching in particular, etc., that are the potential sources of stress. In the absence of any realistic possibility of constructing measurement tools that adequately tap into this complex network of antecedents, biographical characteristics are used in the present research as the best summary approximations.

In summary, many personality and biographical characteristics are expected to affect the degree to which teachers feel stressed in their work roles.

A Word of Caution

Many variables may also moderate the relationship between role stress on the one hand and role strain and employee withdrawal on the other. Financial and temporal constraints dictate that these moderators of the stress-strain/withdrawal not be explored in depth here. For completeness, however, these situational and individual moderators are included in the conceptual framework.

Situational Moderators. Two primary situational moderators can be identified, viz., social support and autonomy. *Social support* refers to the extent to which the interpersonal network of the focal person provides a supportive climate for him/her. The centrality of social support as a moderating variable has been highlighted in many investigations (Beehr, 1976; Caplan et al., 1975; Cobb, 1976; Gross et al., 1958; Kahn et al., 1964; LaRocco, House, & French, 1980; Organ, 1970). The school principal was mentioned earlier as a potential interpersonal stressor. But the school principal can *also* provide the kind of support that teachers need to cope with role stress. Similarly, other teachers can buffer the experience of stress in many ways. It has been noted that misery loves company. Just knowing that one's experiences are not unique may ameliorate many harmful consequences of stress.

Autonomy, the degree of discretion that the job allows, can also be viewed as a moderator of role stress/role strain and withdrawal relationships. Autonomous teachers in ambiguous roles, for example, can define their own role expectations. Similarly, autonomous teachers may be able to resolve the conflict inherent in incompatible role expectations. The moderating effects of autonomy have been demonstrated in some previous research (e.g., Beehr, 1976; Corwin, 1965; Walsh et al., 1980).

Thus, social support and autonomy are likely to be salient moderators of the relationship between role stress on the one hand and role strain and withdrawal on the other.

Individual Moderators. Characteristics of the focal person may also moderate the extent to which the experience of stress has deleterious consequences. For example, different people have different levels of tolerance for stress. In addition, job motivation may also affect the extent to which stress is harmful for the teacher.

Stress tolerance has been demonstrated in many studies to moderate the relationship between role stress on the one hand and role strain and withdrawal on the other (Beehr, 1974; Lyons, 1971). Thus, for example, an individual who is tolerant of ambiguity is less likely to be negatively affected by the experience of role ambiguity than an individual who is intolerant of ambiguity. A similar argument can be made with respect to the other role stresses under investigation in the present research.

Another intrapersonal variable that may serve as a moderator in the present context is the level of job *motivation* experienced by the individual. An individual who is highly motivated to do the job well is likely to suffer greater adverse effects of stress than one who is not motivated to perform well (presumably since these stresses may inhibit effective role performance). Although the effects of motivation have been examined extensively in the literature (e.g., Hackman & Lawler, 1971), the moderating potential of the variable has been relatively unexplored in the past. It can be argued on theoretical grounds, however, that motivation is likely to affect the relationship between role stress and role strain and withdrawal.

In addition to these situational and personal moderators of the stress-strain/withdrawal relationships, it is expected that an individual who experiences many stresses simultaneously will be more adversely affected than one who experiences only a few stresses at any time.

Although these moderators will not be explored extensively in the present research, it is well to keep them in mind in the examination, interpretation, and discussion of the results obtained from the research.

Summary

The conceptual framework of role stress to be used in the present study was presented diagrammatically in Figure III.1. It shows many stressors affecting the experience of stress, and the experience of stress, in turn, affecting many symptoms of strain and withdrawal. Personal and situational moderators of the latter sets of relationships were also identified.

Chapter IV

RESEARCH DESIGN AND METHODOLOGY

Four major steps were entailed in the design of the present research, viz., selection of the sample, instrument design, data collection, and analysis specification. Each step is described briefly below.

Selection of the Sample

Data for the study were collected from 25 teachers in three junior high schools from one school district located in the Southwest.

School District

The sample was limited to only one school district for budgetary reasons. The exploratory nature of the research also minimized the need for multiple school districts to be represented in the sample. A letter describing the nature of the study and soliciting cooperation was sent to the Research Office of the school district, and approval for the research was secured. Simultaneously, ongoing discussions were conducted with the President of the local Teachers' Association to explicate the nature of the study and to encourage the participation of teachers. The President approved the conduct of the research; in addition, the membership rosters of the Association were made available for sample selection purposes. Thus, school district cooperation was solicited, and obtained, on two fronts--from the administration, and from the Teachers' Association.

Schools

Within the school district, the sample was limited to teachers in *three* junior high schools. The three schools were chosen to represent diversity in terms of neighborhood--School A was located in a high income neighborhood, School B in a middle income neighborhood, and School C in a low income neighborhood. It was felt that a sample from three schools would provide variations in the organizational antecedents of role stress of interest in the study, while also ensuring responses from sufficient numbers of teachers in each school to lend stability to the results. Letters describing the study were sent to the Principals of each of the three junior high schools. All three agreed to the conduct of the research among teachers from their schools.

Teachers

The sample of teachers to be interviewed was selected from the membership list of the local Teachers' Association. Teachers from the three schools were selected with the target figure of 25 teachers to be interviewed. In essence, this entailed selecting approximately one-third of the teachers from each school. Race and gender were used as stratifying variables within each school. Although the original intent was to stratify on age as well as on race and gender, the infrequent availability of age data necessitated abandoning this criterion. Within the two constraints of race and sex, the teachers were selected randomly within each school. Thus, a stratified random sample of teachers from three schools was obtained.

Overall, 37 teachers from the three junior high schools were included in the sample. Of these, 25 agreed to participate in the study. Fify-four percent of teachers from School A, and 75% from each of Schools B and C were interviewed, yielding an overall response rate of 68%. The lower response rate in School A was attributable, not so much to actual refusals, as to difficulities in contacting subjects and scheduling interviews.

Table IV.1 presents the demographic and background characteristics of the teachers in the sample. The figures are shown both in terms of the individual schools and for the overall sample. The table shows that a large proportion of the sample was female, married, white, and had less than three years' tenure in the school. All teachers in the sample had a secondary teaching certificate; some had elementary certifications as well. Some teachers taught the eighth grade only, but the large majority taught both the seventh and the eighth grades. The income level for most respondents fell below $16,000 per year.

For the most part, the distribution of demographic and background characteristics of the teachers in the present sample was similar to that obtained in larger surveys of teachers (e.g., Oxman & Michelli, 1980).

Instrument Design

Data from the sample were collected through a semi-structured interview. The interview schedule was designed to cover a variety of areas, including the different stressors, stresses, strains, and withdrawal manifestations. In addition, information on certain demographic/background characteristics was considered desirable. Table IV.2 presents a list of the areas that the interview schedule was intended to include.

The list of relevant concepts for the interview was discussed with experts in the field, such as knowledgeable university faculty and school teachers similar to (but not including) those in the sample. These discussions enabled finalizing the roster of variables to be included. An

Table IV.1

Demographic and Background Characteristics of the Sample

Characteristic	Overall	School A	School B	School C
Sex				
Male	32%	29%	44%	22%
Female	68%	71%	56%	78%
Race				
Black	8%	14%	0%	11%
Hispanic	24%	14%	33%	22%
White	68%	72%	67%	67%
Marital Status				
Married	72%	57%	78%	78%
Divorced	20%	29%	11%	22%
Never Married	8%	14%	11%	0%
Income				
$ 8,000 - $ 9,999	12%	0%	11%	22%
$10,000 - $12,999	36%	43%	45%	22%
$13,000 - $15,999	28%	29%	22%	34%
$16,000 - $19,999	12%	14%	11%	11%
$20,000 or more	12%	14%	11%	11%
Total Years in Teaching				
Less than one year	12%	0%	0%	33%
1-3 years	24%	0%	44%	22%
4-5 years	4%	29%	0%	0%
6-10 years	44%	71%	34%	45%
11 years or more	16%	0%	22%	0%
Tenure in School				
4-11 months	40%	14%	67%	33%
1-3 years	32%	29%	22%	45%
4-5 years	12%	29%	0%	11%
6-10 years	12%	29%	0%	11%
11 years or more	4%	0%	11%	0%

Table IV.1 (Cont'd)

Characteristic	Overall	School A	School B	School C
Grade Level Taught*				
7 and 8	67%	43%	88%	67%
8 only	29%	57%	12%	22%
Certification				
Secondary Only	83%	71%	88%	89%
Elementary and Secondary	17%	29%	12%	11%
TOTAL N	25	7	9	9

* One teacher was responsible for In-School suspension.

Table IV.2

Areas to be Covered in the Interview

Stressors

Environmental stressors--boundary-spanning activities*, number of different roles*, occupational status

Organizational--school size, formalization, bureaucratization, participation in decision making, multiple authority structures*

Interpersonal--characteristics of school principal, characteristics of other administrators, characteristics of other teachers/counselors, characteristics of students, discipline issues

Job-related--responsibility for students, variety, job importance, feedback

Intrapersonal--Type-A personality[+] (Sales, 1969), authoritarianism[+] (Lane 1955), rigidity[+] (Gough, 1957), deviance from normative climate, biographical variables (age*, tenure, race, sex, community size, number of dependents, income)

Role Stresses

Role Conflict

Role Ambiguity

Role Overload--quantitative and qualitative overload

Role Underload

Role Insufficiency

Role Strain Symptoms

Psychological--depression, life satisfaction, self-esteem, boredom, job satisfaction, irritation, anxiety

Behavioral--drug use, smoking*, caffeinated drinks, alcohol use

Physiological--somatic complaints, general physical health

Table IV.2 (Cont'd)

Withdrawal Tendencies

Distancing Forces

Binding Forces

Withdrawal Manifestations

Estrangement

Tardiness

Absenteeism

Turnover Intent

* These questicns were not asked in the interview.

+ These questions were aked through a self-administered, closed-ended questionnaire.

initial draft of the interview guide was then developed. It was clear from the 100+ questions in the draft interview that the well over four hours of each respondent's time would be needed if the interview was to be completed in its entirety. The list of questions was honed, therefore, to a more manageable number. The revised interview guide was administered to three teachers, and these pre-test interviews were instrumental in completing the final version of the interview schedule. The interview guide is included here as Appendix A.

It is obvious from examining Appendix A that not all concepts of interest could be included in the interview. Notable exclusions from the final interview included certain environmental stressors (such as boundary-spanning), and certain organizational stressors (such as multiple measures of size). In general, the exclusions were based on three criteria: centrality to the theoretical framework; relevance to the teaching population; and ease of data collection through the semi-structured interview format. Table IV. 2 also shows the concepts that were not included in the interview guide.

Data Collection

The data collection phase of the research incorporated many steps, including the selection and training of interviewers, scheduling and conducting interviews, and coding and data reduction.

Interviewers

The interviews were conducted by two interviewers. Both interviewers had Master's degrees in related fields, and both had previous experience in semi-structured interviewing; they also had some knowledge of the content area of the research. One interviewer was male, and the other was female. Likewise, one interviewer was white, and the other hispanic. In view of the small number of male and minority respondents in the sample, however, gender and race matching between interviewer and respondent was not appropriate. Thus, respondents were assigned to the two interviewers at random.

The interviewers were briefed on the interview schedule in considerable detail. After each had conducted two interviews, moreover, the interviewers reconvened with the Principal Investigator, and any remaining difficulties/problems were ironed out.

Interviews

Respondents were contacted initially by the Principal Investigator. A detailed letter describing the nature and goals of the study, outlining interview and confidentiality procedures, and soliciting the cooperation of respondents was mailed to the homes of the teachers in the sample. A copy of the letter is reproduced as Appendix B.

After the teachers had received the letters, they were contacted by telephone by the interviewers to schedule the interviews. Due to the conditions of participation vis-à-vis the school district, interviews were conducted, with one exception, in the teachers' homes or in the school during non-school hours. Each interview took approximately one hour to complete. With the teachers' permission, the interviews were tape recorded; additionally, the interviewers wrote down the responses of the teachers in the greatest detail possible.

All 25 interviews were completed within the course of approximately one month. Because of the timing of data collection (January), cooperation of respondents was obtained with relative ease.

Data Reduction and Coding

The original intention was to transcribe the interview tapes. But, due to the time and expense involved in transcription, this plan was abandoned. Instead, the interviewers' notes were used as the primary data source. The tapes were used to supplement information from the notes as necessary.

Each interview was coded by the Principal Investigator. The coding had three main objectives:

(a) to determine whether the phenomenon of interest occurred;

(b) to determine the severity/intensity of occurrence of the phenomenon; and

(c) to provide detailed qualitative information on the role stress experiences of teachers.

The coding scheme for the interview schedule, and a summary of the coding conventions, are reproduced in Appendix C. After the data were coded, they were computerized for ease of analysis.

Most questions in the interview were in a format that rendered index construction unnecessary. A few items, however, had to be combined in order that they could be used appropriately in analysis. Specifically, indices measuring personality characteristics (Type-A personality, authoritarianism, rigidity) as well as some of the strain measures (caffeine intake, drug use, alcohol use, psychological strain symptoms, etc.) were constructed.

The *Type-A personality* items (items 30a, 30c, 30e, 30g, 30i, 30k, 30m, 30p, and 30s in the interview) were taken from Sales (1969). These items had a mean intercorrelation of .18, and the reliability of the scale (Coefficient α) was .67. Items measuring *Authoritarianism* (items 30f, 30l, 30n, and 30r) were taken from Lane (1955). These items had a mean intercorrelation of .26 and a reliability (Coefficient α) of .58. Finally, items 30b, 30d, 30h, 30j, 30o, and 30q in the questionnaire were taken from Gough (1957), and measured *Rigidity*. These items had a mean intercorrelation of .13 and a reliability (Coefficient α) of .48. Although the reliability of the indices in the present sample was not very high, the indices were constructed nevertheless, in view of their long-standing recognition in the field as psychometrically accurate assessments of the concepts of interest. In all three cases, scores on the component items were averaged to derive the index score for each respondent.

The strain indices, on the other hand, were summative in nature. That is component scores were *added*, and not averaged, to derive the index score. Thus, the *alcohol use* index combined the use scores for beer, liquor, and wine; the *drug use* index combined the scores for prescription and over-the-counter drug use; and *caffeine use* index combined the scores on the use of coffee, tea, and cola drinks. Finally, the *psychological strain* index counted the number of different symptoms of psychological strain (e.g., fatigue, nervousness, irritation, anxiety, depression, boredom, and low self-esteem) experienced by the respondent. Either a moderate or high level of strain on each item was necessary for it to be counted toward the summary index.

Coding the data and constructing the indices completed the work necessary before data analysis was possible.

Analysis Specification

Six sets of quantitative analyses were of interest in the present study. First, the frequency and severity of the role stress, role strain, and withdrawal measures were examined. Simple descriptive statistics were considered sufficient for these purposes. Thus, frequency distributions, means, variances, and other descriptive measures were computed for these variables.

Second, the relationship of the different stressors to each stress was determined. Cross-tabulations were used to elicit the extent to which each stressor was related to different stresses. This enabled the computation of both parametric (Pearson's r) and non-parametric (χ^2) statistics.

Third, the relationship between the stresses and strains were examined using cross-tabulations. The fourth set of analyses focused on the relationships between the stresses and withdrawal tendencies and manifestations. Fifth, the relationships *among* the strains was examined. The final set of analyses addressed the relationship between the strain symptoms and withdrawal tendencies/manifestations. All these analyses entailed the use of cross-tabulations to generate two-way contingency tables, and to compute parametric and non-parametric measures of association between the variables.

In addition to these quantitative analyses, the interview protocols were examined to detect patterns, problems, and perceptions that would elucidate the quantitative findings. Because the interviews were semi-structured in format, the responses of the teachers could be examined to facilitate interpretation of the data, and to lend richness that cannot be obtained from strict quantitative analyses.

Chapter V

RESULTS

As mentioned in Chapter IV, six sets of analyses were particularly relevant to the present study. These were:

(1) Frequency and severity of role stress, role strain, and withdrawal;

(2) Relationships between the stressors and role stress;

(3) Relationships between role stress and role strain;

(4) Relationship between role stress and withdrawal;

(5) Relationships *among* the different symptoms of role strain; and

(6) Relationships between role strain and withdrawal.

The results of each of these analyses are presented in this chapter.* Before discussing the quantitative results, however, profiles of some teachers under high and low stress are presented.

Profiles of Teachers under High and Low Stress

Given its small sample size, the present study was fortunate in obtaining wide variations in the stress experiences of teachers. Some teachers in the sample, for example, experienced severe stress, and were ready to demand "combat pay"; others felt that their jobs were ideal, and few, if any, factors detracted from their complete contentment with their jobs.

In this section, profiles of two teachers falling into each of these categories are presented. Confidentiality constraints have necessitated that background information be occasionally altered.

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* The reader is referred to Appendix C for details of the coding scheme and conventions used in the study.

Teachers under High Stress

Sarah is a Hispanic teacher who is single, and who has been teaching for several years in a school predominantly made up of Anglo teachers and administrators, and where, until recently, the students have also been predominantly white. Sarah teaches 5 classes in the same subject area every day. She has many discipline problems in her class, and doesn't feel she received the training to handle these discipline issues effectively. Furthermore, the local school rules demand that most student-related matters pertaining to discipline be turned over to the administration. She feels that the inconsistent implementation of discipline policies in her school undermines her classroom effectiveness considerably.

Sarah feels that the administrators in her school don't talk to each other. Often one of them tells her to do one thing; another tells her to do something totally different. Even the same administrator is sometimes inconsistent from day to day. Given the conflicting messages she gets from administrators as well as from parents, Sarah is not quite sure exactly what her job requirements are.

The situation is compounded by the fact that her teaching profession earns her little respect externally. People either pity her or think she teaches because she couldn't find other work. This lack of social recognition bothers Sarah considerably.

In short, Sarah has a heavy workload, little direction from above, considerable repetitiveness in her job, unclear expectations, inconsistent demands, and an unsupportive administration. To top it all, she feels that her college training left her completely unprepared to handle the realities of her job. Only with several years of teaching experience has she been able to develop effective strategies for her day-to-day classroom problems. The lack of respect for her chosen profession among the external world makes her job situation even more intolerable.

These pressures have been taking their toll on Sarah. She gets depressed every Monday morning when she thinks of having to go back to work. She usually arrives late in the morning for work, and she spends most of her conference time in non-school-related activities. She drinks moderately, and takes occasional "mental health days" to "unstress" herself. Even so, she sees no great relief from her pressures in the near future, and would like to move into a non-teaching position as soon as it is feasible.

Amy is a married Anglo teacher with three children. She has been teaching for only a short time, and this is her first teaching assignment. Amy feels that the administrators in her school have little understanding of the subjects she teaches and, as a consequence, make constant and unreasonable demands on her. Because they consider her primary teaching assignment to be "soft," they have given her additional classroom responsibilities, but in subject areas where she has little training, preparation, expertise, or interest. All her workload makes it necessary to come to work every Sunday; even so, she feels she is never caught up in her work. Furthermore, she often does not have access to the things she needs. In one class, for example, there are 30 desks for 35 students. Many of the materials she needs to do a good job are also unavailable.

Not only does Amy get little support and encouragement from the administration, she also feels isolated from the faculty as a whole. In addition, she has several disruptive students in her class. But the problem minority students, she feels, are handled with kid gloves as an overcompensation against accusations of racism. Thus, the discipline problems keep getting magnified as time goes on.

Amy feels that she is treated like a little child herself by the administrators in her school. She is told what to do, how and when to do it (but never why), but these demands are inconsistent from time to time and administrator to administrator. She also gets "written up and scolded" when she doesn't follow all these instructions to the letter.

Also, Amy and her husband nearly got a divorce because of the extensive amounts of time she spent on school work at home. Amy's husband felt she was ignoring her family and her children for her job. Only some complex negotiations between the two of them saved their marriage.

Many of these school-related problems are having physiological manifestations. For instance, Amy recently had a severe backache that necessitated she go to the doctor. The doctor could not identify a medical reason for her aches, and attributed it to tension. Amy has also begun taking a drink every evening when she gets home. She was a teetotaler before she started teaching. As she remarked: "I didn't drink before, but then I hadn't taught before either."

The only thing that keeps Amy going is her love for teaching and her ability to talk things over with other teachers. She feels that usually if she can discuss her problems with other teachers, she can handle the situation and her own responses better. Other teachers have been through the same things themselves--just talking with them gives her the feeling that somebody understands.

Teachers under Low Stress

Larry is an Anglo male who is married and has three children and has been teaching for several years, in his current school and in other schools before that. Larry finds his school to be a nice place to work. The atmosphere is pleasant and most of the students are good children. He feels that they have had a good upbringing, that they enjoy life, that they are hard-working, and that they are academically quite good.

Larry teaches subjects where the curriculum is clear and well-defined. Having taught the same subjects for many years, the preparation time is minimal. Partly because he is a male, and partly because the students are good, Larry never has discipline issues arise that create a problem for him.

Larry feels he has the backing of the school administration. His principal and other administrators are caring and concerned people who go out of their way to ensure that people are treated fairly, justly, and with consideration. Larry is also on reasonably good terms with the other teachers in the school.

All in all, Larry says that these factors make for a good day almost every day. The contentment at school, coupled with a reasonably successful marriage, makes Larry a satisfied and happy person all around.

Brenda is a divorced Anglo teacher who has two children. She has taught for many years. She requested, and received, a transfer to her current school only in the past couple of years. Brenda feels she has a good family, a good job, and that she lives in a good city. Brenda thinks of the school where she teaches now as "her" school. She lives in the neighborhood and all the children from the neighborhood go to this school. She feels she has an interest in the school beyond just working there.

Brenda is able to obtain the things she needs in order to do her job. Because she has been teaching for many years, she knows what to do in class and when to do it. She has the support of the administration when she wants to try new and different approaches. For instance, she wanted to teach another subject area, so she got her certification in that area, and was able to teach it. She feels a need to be doing different things, and the fact that she teaches, coupled with the school in which she teaches, enables her to realize this desire. As she noted, "when you teach in a junior high school, no two days are ever the same."

Brenda likes the principal ("I just love him"), likes the administrative staff, and likes the other teachers. "They're all my friends. We have a pretty close staff here. I've substituted in other schools, and our school has one of the closest-knit staffs."

Although she is quite busy most of the time, Brenda is happy with her life. She has input into decisions that affect her life. She has a challenging job that she loves. Her health is good. She hasn't missed a day of school for many years. She teaches because she loves teaching and because she loves her school. The thought of doing some other kind of work, or teaching in a different school, is totally abhorrent to her.

Summary

The foregoing accounts demonstrate clearly that major differences exist in the nature and intensity of the work-related experiences of teachers. All the teachers are quite busy. It is not the simple fact of high work loads that differentiates between the teachers experiencing high and low work loads. Rather, it is factors such as the ability to deal with classroom crises, being able to count on the support and understanding of principals and administrators, having the resources and information to go a good job, being treated as professionals, etc. that distinguish the teachers who feel highly stressed from those who do not.

In the next few sections, the data are examined both qualitatively and quantitatively to elicit an understanding of the role stress experiences of junior high school teachers.

Relative Levels of the Variables

In this section, the frequencies and averages of the different role stresses, role strains, withdrawal tendencies, and withdrawal manifestations are examined quantitatively. In addition, comments from the respondents are included to elucidate, elaborate, or illustrate the quantitative findings where appropriate.

Role Stress

The relative frequency with which teachers experienced role stress is described in Table V.1. Statistics for the different stresses are reported for the overall sample, for the three schools, and also separately for females and males.

Overall Sample. Quantitative role overload was the stress reported by teachers most often, followed by role ambiguity, and role insufficiency. Role underload was the stress experienced by teachers least often, while role conflict and qualitative role overload fell in between.

An attempt was also made to determine the exact types of the different stresses, and the sources of the stress, experienced by the teachers in the sample. With respect to role conflict, for example, an attempt was made to assess whether the respondent was experiencing inter-sender, intra-sender, person-role, or person-sender types of role conflict. A similar determination was also made with respect to the other stresses.

The conflict varieties reported by respondents most often were person-sender conflict (36%) and intra-sender conflict (32%). Other conflict types reported included person-role conflict (16%), inter-sender conflict (7%), and conflicts due to time constraints. The last subcategory is probably classified more appropriately as role overload.

Some of the role conflicts associated with the teachers' job were recounted by Peter, one of the sampled teachers:

> "As a teacher, you try to be a friend to students in some cases, and not a friend in others; you have to be a parent in some cases; and at the same time, you have to be different from all that and be a teacher. I have 130 students who are completely different from one another. One of the hardest philosophical

Table V. 1

Relative Levels of Role Stresses

	Role Conflict	Role Ambiguity	Quantitative Role Overload	Qualitative Role Overload	Role Underload	Role Insufficiency	Other Role Stresses
Overall Sample (N=25)							
Low	32%	32%	24%	36%	40%	48%	22%
Medium	48%	40%	24%	40%	48%	28%	39%
High	20%	28%	52%	20%	12%	24%	39%
Mean	1.88	1.96	2.28	1.83	1.72	1.76	2.17
School A (N=7)							
Low	29%	43%	29%	43%	57%	43%	17%
Medium	57%	29%	14%	43%	43%	29%	33%
High	14%	28%	57%	14%	0%	28%	50%
Mean	1.86	1.86	2.29	1.86	1.43	1.86	2.33
School B (N=9)							
Low	22%	33%	33%	38%	33%	45%	29%
Medium	56%	56%	45%	50%	56%	22%	43%
High	22%	11%	22%	12%	11%	33%	28%
Mean	2.00	1.78	1.89	1.75	1.78	1.89	2.00
School C (N=9)							
Low	45%	22%	11%	33%	33%	56%	20%
Medium	33%	33%	11%	33%	45%	33%	40%
High	22%	45%	78%	33%	22%	11%	40%
Mean	1.78	2.22	2.67	2.00	1.89	1.56	2.20
Males (N=8)							
Low	13%	63%	63%	50%	25%	75%	20%
Medium	75%	37%	25%	50%	63%	25%	40%
High	12%	0%	12%	0%	12%	0%	40%
Mean	2.00	1.38	1.50	1.50	1.88	1.25	2.20
Females (N=17)							
Low	41%	18%	6%	31%	47%	35%	23%
Medium	35%	41%	23%	38%	41%	30%	39%
High	24%	41%	71%	31%	12%	35%	38%
Mean	1.82	2.24	2.65	2.00	1.65	2.00	2.15

> things to do is to separate what it is you do as opposed to what you're supposed to do, the ideal.
>
> (The administrators and staff) don't make it easy. We're asked to manage our classes so they're quiet. But in (some subjects), it is hard to run a quiet class. This is not a Math or Science class."

Role ambiguity occurs either when a job is not clearly defined, or when it is unpredictable from day to day. Twenty-four percent of the respondents perceived their jobs to be unpredictable; 20% thought their jobs were undefined; and a further 8% saw their jobs as being *both* undefined and unpredictable. With respect to this variable, one teacher noted:

> "The curriculum is not clearly defined. We get mandates from the legislature to teach seven hours of economics, to teach citizenship, and so forth. But how do you get that across? School spirit - how do you get that across?"

It was mentioned earlier that quantitative role overload was the stress teachers reported experiencing most often. When asked about the reasons for the experienced overload, 20% of the teachers responded that it was the number of different preparations they had to make. Other reasons offered by teachers for their high quantitative overload included class size (one teacher said he/she handled 150 students), school hours, committee work, and being volunteered (by the administration) for many non-classroom-related activities. Many illustrations of quantitative overload were evident in the interviews.

> "From the time I run in the door, I run all day long. It's just keeping up with the mechanical things that need to be done."

> "Teachers are forced to spend too much time grading and in lesson plans, especially with individualized instruction. I'm forced to spend lots of time outside school--hours--at home on preparation. It hits me on Sunday."

> "I have four entirely different preparations. I wouldn't want to teach the same thing all day long, but I think that's a little much."

> "I have five classes in a row, five preparations. My off-period is last. After fifth period, I just fall apart. I literally never sit down during the day. I'm not emotionally wrung out but physically I'm extremely tired."

Twenty percent of the teachers in the sample reported high levels of qualitative role overload; a further 40% experienced medium levels of qualitative overload. Twenty-eight percent of the teachers interviewed reported that they lacked adequate training and experience in the classroom skills that they needed to perform effectively--often they were assigned to teach classes in subject areas totally unrelated to their expertise; in addition, they were not trained in the behavioral skills necessary to run an effective class. In fact, 36% of the respondents noted that they had suffered severe qualitative role overload when they began teaching in junior high schools. Only experience, these teachers noted, mitigated against their continued endurance of this stress. Some comments on this issue are reported below.

> "I had no idea what I was going to encounter in a junior high school. As for academics, I was very well-prepared, but not in other matters. I expected the children to be eager to learn. I also expected them to have a lot more knowledge and basic skills than they do. I never expected a kid to talk back to me. Educators never tell you this. They say kids will mind you and kids will not cause problems if they are motivated to a certain degree. That's not true."

> "I never felt I was adequately taught to go into this job. For some of the curriculum and methods--yes, but as for the management of the class--no. I have those skills now, but that came from experience."

> "I get a lot of Special Ed kids mixed in with the regular kids and gifted kids all in one crew. I don't have the hours or the training to understand or to know what to do with the Special Ed kid who can't read and who can't write."

> "In the beginning, I had to start from scratch. We don't have enough training or skills to begin with to make the first year an unstressful year. A little more realistic training would help bridge the gap."

Role underload was not a stress that many teachers reported experiencing. Of those teachers who reported at least moderate levels of role underload, many (24%) remarked that they were not assigned to teach those subject areas they were most qualified to teach. Other reasons for role underload mentioned by respondents were that students were not of a sufficiently high academic level, that training/administrative skills were being under-used, and that team teaching skills were rarely used. A sampling of related comments is provided below.

> "I'd like to teach literature, but in Junior High School, you have to teach spelling, grammar, and composition. You just don't get around to literature--it takes a back seat."

> "I majored in history, but I'm assigned to teach art."

> "This is not my area. I really don't know what to do with the kids. Some of the other teachers have been helping me. And I resent not being able to use my training."

Role insufficiency was a stress that approximately help the sample experienced, at least to a moderate degree. Many teachers (28%) reported that they had inadequate supplies (textbooks, film strips, water, paper), some (20%) that they had inadequate equipment (typewriters, gas jets, microwave ovens), and still others (16%) that they did not have enough space (both room size and storage space) to do a good job. A few comments are listed below.

> "They stack us in a building that should have been condemned--the windows don't lock, and air seeps through. We got hired the first week of school, and we did not get our students until a month after school had begun. My desk is falling apart, so is the filing cabinet."

> "I have 35 kids in one class and 26 desks. I have a map of the U. S. that was made in the '50's. I sometimes teach Texas history, and I don't have a map of Texas."

Finally, the respondents were questioned about the other stresses they may be experiencing as part of their job. In general, the stresses mentioned by respondents in this context could be subsumed under the role stresses defined earlier, i.e., role conflict, role ambiguity, role overload, role underload, and role insufficiency. For example, respondents mentioned having too much work (qualitative role overload), the lack of content skills in subject areas they were teaching (qualitative role overload), and the inability to use skills and training (role underload). Variables not thus subsumable under the umbrella of 'role stress' could generally be classified as stressors in the present conceptual framework--characteristics of students, other teachers, and administration, organizational policies, low occupational statue, and so forth. The severity with which teachers in the sample experienced these phenomena is reported in Table V.1.

School Differences. Table V.1 also presents the frequencies and mean levels of the stresses separately for each school. With a couple of exceptions, the highest levels of stress were reported in School B. Furthermore, quantitative role overload was the stress that was experienced most by teachers in two of the three schools. Reports of role underload were particularly low in School A; School B had the lowest levels of qualitative role overload, and School C had low levels of role insufficiency. Role conflict was not experienced to a great degree by teachers in any of the three schools.

Gender Differences. Table V.1 shows that women are much more susceptible to the experience of stress than are men. Seventy-one percent of the women, as compared to only 12% of the men, reported high levels of quantitative role overload; likewise, gender differences can be observed in terms of role ambiguity and role insufficiency. On none of the variables do men report the experience of high stress more often than do women, although the mean levels for role conflict and role underload were higher for men than for women.

Role Strains

The relative frequencies with which the three sets of strains (psychological, physiological, and behavioral) occurred are reported in Table V.2. For purposes of brevity, role strain levels are not reported separately for the three schools and for men and women. This procedure will be followed throughout the report, except as the data indicate interesting, informative, or insightful school- or gender-related differences. Information on such differences will be reported in the text as appropriate.

Table V.2 shows the highest and lowest levels of *psychological* strain on fatigue and anxiety. These data are the most unstable, however--80% of the responses did not mention fatigue and 88% did not mention anxiety when asked about their psychological strain symptoms. Among the more stable psychological symptoms, the highest levels were evident with respect to job dissatisfaction and irritation, followed closely by nervousness, life dissatisfaction, and boredom. It should be noted in this context that most respondents experienced reasonably high levels of self-esteem, and that the experience of depression was infrequent.

The *physiological* symptoms of strain were rare among the teachers in the sample. Only 16% of the respondents had a high level of somatic complaints (headaches, insomnia, hypertension, etc.), and 64% rated their overall health as being high. Thus, the teachers we interviewed were in reasonably good physiological condition.

Table V. 2

Relative Levels of the Role Strains

	No	Low	Medium	High	Not Mentioned	Mean
Life Dissatisfaction*	†	44%	56%	0%	0%	2.56
Job Dissatisfaction*	†	48%	36%	16%	0%	2.68
Fatigue	8%	0%	0%	12%	80%	2.80
Nervousness	8%	28%	24%	16%	24%	2.63
Irritation	8%	28%	16%	20%	24%	2.67
Anxiety	8%	4%	0%	0%	88%	1.33
Depression	8%	48%	20%	0%	24%	2.16
Boredom	12%	40%	12%	20%	16%	2.48
Low Self-Esteem*	48%	32%	0%	0%	20%	1.40
Physiological Symptoms						
Somatic Complaints	32%	44%	4%	16%	4%	1.04
Overall Physical Health	†	8%	24%	64%	4%	2.58
Behavioral Symptoms						
Caffeine Drinks	0%	52%	28%	16%	4%	α
Drug Use	0%	56%	28%	12%	4%	α
Alcohol Use	0%	32%	36%	28%	4%	α

* Scales were reversed for analysis

† Inappropriate coding category

α Inappropriate statistic

Finally, *behavioral* symptoms of strain also occurred only sporadically. Only 16% of the respondents could be classified as having high caffeine intake, and only 12% used many drugs. Alcohol use, however, was more common among the sample, with heavier concentration on beer and wine rather than hard liquor.

In general, the strain symptoms observed most frequently among teachers in the present sample were job dissatisfaction, irritation, and alcohol use.

Withdrawal

Two aspects of employee withdrawal were examined--withdrawal tendencies and withdrawal manifestations. The relative levels of these variables among the teachers in the sample are displayed in Table V.3.

The table shows moderate levels of *withdrawal tendencies* on the part of the respondent. One-third of the respondents experienced high levels of distancing forces, i.e., they wanted to get away from the school, physically or psychologically. About the same propoertion (29%) reported strong binding forces (i.e., the factors that kept them in the school, teaching) as well. Many reasons were mentioned for the experience of the binding forces. For example, almost three quarters of the teachers got some intrinsic enjoyment from teaching junior high school students. Other reasons included needing the money, liking the holidays, job security, and the fact that few alternative job opportunities were available.

In terms of the actual *withdrawal manifestations*, respondents showed low tardiness, moderate absenteeism, and reasonably high levels of turnover intent. Thus, one-third of the teachers said that it was highly likely that they would look for another job in the near future, one-third of the respondents had moderate to high levels of absence, but 82% of the teachers

Table V. 3

Relative Levels of the Withdrawal Indicators

	None	Low	Medium	High	Mean
Withdrawal Tendercies					
Distancing Forces	†	21%	46%	33%	2.13
Binding Forces	†	13%	58%	29%	2.17
Withdrawal Manifestations					
Tardiness	65%	17%	8%	8%	1.58
Absenteeism	17%	50%	29%	4%	2.21
Turnover Intent	21%	21%	25%	33%	2.71

† Inappropriate coding option

reported hardly ever being late. Those teachers who had moderate to high levels of absence reported that they usually only took a day off either when they themselves or their children were sick. One teacher noted, however, that he/she occasionally took a "mental health" day off; another remarked that she/he liked to be able to "unstress myself" every so often.

Many reasons were also offered by the teachers for their turnover intent. The most common reason was to take another non-teaching job; other reasons included going back to school, working in a different school, low pay level, for a "change," etc. Whatever the reasons, the fact remains that over one-half of the sampled teachers had moderate to high intentions of looking for alternative job opportunities in the near future.

Summary

The data indicate that quantitative role overload and role ambiguity are the stresses reported most frequently by the respondents. The strain symptoms reported most often include job dissatisfaction, irritation, and alcohol use. Finally, the sampled teachers showed moderate withdrawal tendencies, low tardiness, but moderate to high turnover intent and absenteeism levels.

Stresses and Stressors

Each stress was examined in terms of its relationships to five groups of stressors, viz., environmental, organizational, interpersonal, job-related, and intrapersonal stressors.

Environmental Stressors

Two groups of environmental stressors--non-work demands and occupational status--were explored in the present study. The relationships of these potential stressors to role stress is displayed in Table V.4. Both a χ^2 and a Pearson's r statistic is reported in each case. Table V.4 shows that, contrary to expectation, occupational status had no systematic relationships with role stress. A detailed examination of the pattern of results indicated, however, that occupational status tends to covary with role conflict and role insufficiency. That is, the higher the occupational status, the lower the role conflict and role insufficiency, and vice versa. In fact, the qualitative data indicate a strong emphasis on this variable among the respondents.

> "I find myself having to defend the public school system and teaching as a profession because so much has been said about the inability of teachers to teach--that stereotypes me. It's a bit frustrating that people think you're a jerk if you teach."

> "I think people push teaching as a women-type job that everybody could do and that is very undemanding. I think in reality if you are a woman and your husband has a job, you are expected to miss school because your job is not important."

> "The thing that bothers me is other people's attitudes toward teachers. I feel like I have to get up on the box and start screaming about it. I wish more people were aware of what teachers do for a living."

Two significant relationships of role stress with non-work demands were detected. As expected, the strength of non-work demands was related to the experience of role conflict (although it is likely that non-work demands stimulate stronger *inter*-role conflicts than intra-role conflicts). In addition, somewhat surprisingly, qualitative role overload was significantly related to the incidence of non-work demands.

All in all, it may be concluded that environmental stressors have some impact, particularly on role conflict. But the overall effect of environmental variables on the experience of role stress is likely to be moderate, at best.

Table V. 4

Relationships between Environmental Stressors and Role Stress

	Non-work Demands		Occupational Status	
	χ^2	r	χ^2	r
Role Conflict	7.25	.38*	8.86	-.29
Role Ambiguity	5.69	.12	2.91	.15
Quantitative Role Overload	9.25	.06	2.21	.14
Qualitative Role Overload	8.06	.37*	6.40	.12
Role Underload	9.62	-.21	3.48	.11
Role Insufficiency	5.77	.21	8.99	.10

* $p < .05$

Organizational Stressors

The organizational stressors of interest in the present study included organizational size, structure, and the degree of participation in decision-making. The results showing the relationships of these variables to role stress are presented in Table V.5. The table shows that, by and large, organizational stressors have little impact on the experience of role stress. Although a few significant correlations were obtained, these could easily have been obtained by chance, and no comprehensive inferences can be made from them. A perusal of the interview protocols, likewise, did not reveal strong feelings on the part of teachers about potential organizational stressors.

With respect to many organizational properties, then, it may be reasonable to conclude that their effect on role stress is negligible.

Interpersonal Stressors

Interpersonal stressors focused on the extent to which characteristics of principals, administrators, other teachers, and students affected the role stress experiences of teachers. In addition, discipline issues were examined as a special category of interpersonal stressors. The results of these analyses are reported in Table V.6. The table shows that problems with students and discipline issues by far outweigh other potential interpersonal stressors. Discipline issues were related to role ambiguity, quantitative role overload, and role insufficiency; problems with students were associated with role conflict. Problems with students were also, surprisingly, *negatively* related to quantitative role overload. This finding is somewhat puzzling, and may be antifactual in that most teachers reported experiencing *high* quantitative role overload.

Table V. 5

Relationships between Organizational Stressors and Role Stress

	Size		Formalization		Bureaucratization		Participation	
	χ^2	r	χ^2	r	χ^2	r	χ^2	r
Role Conflict	8.92	.18	5.28	-.12	5.58	.07	6.11	.24
Role Ambiguity	6.92	-.03	4.83	.21	3.80	.10	7.51	.08
Quantitative Role Overload	3.97	-.07	11.88	.28	5.58	-.24	6.16	-.05
Qualitative Role Overload	4.10	.27	5.30	-.08	5.87	.08	8.00	.03
Role Underload	4.36	.25	3.02	-.10	8.29	.11	2.18	.13
Role Insufficiency	.27	12.85*	2.81	.17	7.04	-.12	8.69	-.09

* $p < .05$

Table V. 6

Relationships between Interpersonal Stressors and Role Stress

	Problems with Principal (N=21)		Problems with Other Administrators (N=9)		Problems with Other Teachers (N=25)		Problems with Students (N=25)		Discipline Problems (N=25)	
	χ^2	r	χ^2	r	χ^2	r	χ^2	r	χ^2	r
Role Conflict	6.74	-.14	.90	-.29	6.38	-.25	8.54	.47**	5.11	.03
Role Ambiguity	2.95	.21	3.94	.53	5.97	.10	10.88	-.33	12.78**	.57**
Quantitative Role Overload	4.84	.28	.56	.23	12.31	.26	7.88	-.41*	5.52	.34*
Qualitative Role Overload	1.98	-.03	1.14	-.34	3.20	-.26	10.01	.22	5.53	.25
Role Underload	3.56	-.14	3.94	.53	6.56	.07	11.31	.14	4.32	.21
Role Insufficiency	11.71	.64**	1.41	.17	7.10	.22	3.55	-.17	11.61	.36*

* $p < .05$

** $p < .01$

Another interesting finding with respect to interpersonal stressors was the strong association between problems with the school principal and role insufficiency. The perception of many teachers was that the principal made classroom and non-classroom demands on their time, but that the resources--staff, materials, equipment--necessary to meet these demands adequately were rarely provided.

An examination of the interview protocols elucidated many interpersonal problems experienced by teachers. Many remarks were addressed toward the principal, the administrators, and the administrative staff, for example.

> "One of the most frustrating things is when I don't get support from the administration. We have two administrators who handle discipline, and one is very inconsistent. As for our principal, he is not very realistic in some of his demands. If you don't have a conference period and you don't have lunch until 1:00 pm, he doesn't expect you to leave your room from the time you come in at 8:10 am until 1:00 pm, and if you do, you get written up. He wants us outside our door 'guarding the 20 feet on either side of our door'."

> "Some of the administrators are on a power trip and they're cruel to students. Sometimes we get bulletins from one administrator that are very strange. One time I got a notice that I wasn't at my door during kids passing."

> "The administrators--they want to see your tests, they want to know how you grade, they want you to do little forms. Sometimes I think they're kind of dumb. My goals are very different from what they wanted me to do."

> "The administration treats you like a machine."

> "The administrators are not really strong. They're not outgoing. They're too much yes-people. They tend to agree with everything teachers say. They're not forceful."

In general, most teachers were pleased with the other teachers in the school. A few teachers felt isolated and excluded from the existing "clique," but given the high regard in which most respondents hold their colleagues, it is not surprising that the latter group was not a significant stressor.

On the other hand, consistent with the quantitative results, teachers mentioned many problems with their students and with discipline.

> "You never know what will happen if you send a kid to the office."

> "The most frustrating things about students are the noise level and not getting work turned in--many kids just sit back and take 'zeros' over and over, and that bothers me a lot."

> "I want stricter discipline than the soft discipline we are required to use because of school board policies. They don't let us carry the discipline to the point where it would be more effective--teachers administering the punishment, and being backed up by the supervisors. A lot of times a disruptive student is sent out of class and in the end they get a little slap on the wrist."

> "Some of the students can't read, write, or function in life. They don't know how to behave. They fight physically and verbally. They use a lot of bad words. I have been threatened by students many times. The discipline could be a lot stricter. More students could be suspended."

> "The kids who are on drugs aren't the disruptive ones, but all the other kids know. They watch and laugh, and are otherwise distracted."

> "There is no consistency in the way discipline problems are resolved."

> "Junior high school is one of the hardest ages to teach. I'm ready for combat pay."

In summary, then, students and discipline issues appear to affect role stress consistently; in addition, characteristics of principals and other administrators also have some stressing potential.

Job-related Stressors

The job-related stressors examined in this study included variety, importance, feedback, and responsibility. The associations of these variables to role stress are reported in Table V.7. The table shows two negative correlations with job variety--the higher the variety, the lower the

Table V. 7

Relationships between Job-Related Stressors and Role Stress

	Variety		Importance		Feedback		Responsibility	
	χ^2	r	χ^2	r	χ^2	r	χ^2	r
Role Conflict	6.66	-.52**	8.62*	-.52**	2.10	-.05	1.25	-.04
Role Ambiguity	3.71	.12	1.98	.14	4.17	.07	5.10	.39*
Quantitative Role Overload	2.18	.25	4.73	.26	1.45	.14	4.95	.18
Qualitative Role Overload	2.63	-.09	.47	-.13	3.99	-.12	4.81	.09
Role Underload	11.20*	-.61**	4.17	-.16	7.92	-.03	2.24	.09
Role Insufficiency	4.05	-.01	2.89	-.28	6.87	.02	4.67	.00

* $p < .05$

** $p < .01$

role conflict and role underload. The perception of job importance was also associated negatively with role conflict.

An interesting finding in this context was the association between responsibility and role ambiguity. Those teachers who felt that their jobs entailed responsibility also were likely to experience their jobs as being unpredictable or unclear. To the extent that responsibility for students encompasses many areas of life, it is hardly surprising that teachers felt lack of clarity about specific role expectations.

The teachers in the sample made some interesting and informative comments about the characteristics of their jobs, particularly with reference to feedback.

> "I've seen some teachers burn out who are young and enthusiastic, but are not getting any positive feedback from either colleagues or administrators. Without these positive strokes--well, you can only go so far with just knowing yourself that you're doing a good job. But at some point you need recognition from above."

> "I think when the kids come back from high school and say: 'I'm so glad you made me do this'--to me that's how well I'm doing. Or to see a kid who comes in and can't get his act together and can't keep up with everything, and you just sit on the kids for a semester, and suddenly they pull it together--that's how well I'm doing."

> "I can just stand there and look at the expression on the students' faces, and I can tell how well I'm doing."

Despite these comments about feedback, no significant relationship of this variable to role stress could be observed.

In summary, job characteristics, particularly job variety, had some impact on role stress. Furthermore, in many cases inverse, as opposed to a direct, relationships were observed between role stress and job-related stressors.

Intrapersonal Stressors

Two groups of intrapersonal stressors were examined--demographic/background characteristics and personality characteristics. The relationships of role stress to a number of demographic characteristics is displayed in Table V.8. The table shows sex, number of years of teaching experience, and the number of hours worked to have some relationship with role stress. Women report role ambiguity and quantitative role overload more often than men; teachers who had been teaching for several years experienced *lower* levels of quantitative and qualitative role overload than newer teachers; the number of hours worked was also associated with role ambiguity and role insufficiency. Other demographic/background variables also showed sporadic associations with role stress. Overall, however, sex and teaching experience are the two most powerful predictors of role stress among the teachers in the present sample.

Unlike demographic/background variables, personality characterics were, by and large, insignificant stressors in the present study (Table V.9). Value inconsistency was expected to be stressful, but the qualitative data indicate it was not, at least for the sampled teachers. Likewise, Type-A personality and authoritarianism did not appear to be strong stressors, although rigidity appeared to increase perceptions of role underload, and *decrease* feelings of role insufficiency.

To summarize, then, demographic and background characteristics (particularly sex and teaching experience) were the intrapersonal characteristics of importance in the role stress experiences of teachers in the present study.

Summary. Environmental and organizational characteristics were not strongly

Table V. 8

Relationships between Intrapersonal Stressors (Demographic and Background Characteristics) and Role Stress

	Sex		Total Teaching years		Tenure in School		Income		Hours Worked	
	χ^2	r	χ^2	r	χ^2	r	χ^2	r	χ^2	r
Role Conflict	3.52	-.12	22.26	-.23	6.70	-.28	12.37	-.27	7.91	.05
Role Ambiguity	6.73*	.52**	28.16	-.19	4.71	-.09	12.35	-.27	8.28	.41*
Quantitative Role Overload	10.80**	.65**	23.07	-.34*	7.10	-.11	11.62	-.26	6.24	.30
Qualitative Role Overload	3.20	.32	26.55	-.52**	9.72	-.36*	9.72	-.47*	6.46	.19
Role Underload	1.18	-.16	26.97	.24	12.01	.24	10.28	.12	13.77	-.27
Role Insufficiency	4.65	.43	28.33	-.29	4.92	-.06	6.21	-.31	7.31	.39*

Table V. 8 (Cont'd)

	Grade Level Taught		Certification		Marital Status		Race		School	
	χ^2	r	χ^2	r	χ^2	r	χ^2	r	χ^2	r
Role Conflict	7.24	†	3.90	-.38*	4.00	†	8.76	†	1.52	†
Role Ambiguity	6.01	†	5.49	-.29	10.24*	†	2.35	†	3.19	†
Quantitative Role Overload	4.99	†	1.99	-.19	1.84	†	4.22	†	6.20	†
Qualitative Role Overload	2.50	†	1.42	.25	9.20	†	7.31	†	1.47	†
Role Underload	8.10	†	1.13	.03	6.98	†	4.13	†	2.51	†
Role Insufficiency	2.57	†	2.29	-.16	7.23	†	3.45	†	1.38	†

* $p<.05$
* $p<.01$
† Inappropriate analysis

Table V. 9

Relationships between Intrapersonal Stressors (Personality Characteristics) and Role Stress

	Value Inconsistency		Type-A Personality		Authoritarianism		Rigidity	
	χ^2	r	χ^2	r	χ^2	r	χ^2	r
Role Conflict	6.23	-.05	32.47	-.01	23.72	-.04	31.46	.23
Role Ambiguity	4.43	.02	37.46	.21	23.33	-.29	33.40	-.32
Quantitative Role Overload	2.25	.07	32.53	.10	21.85	-.03	26.43	-.30
Qualitative Role Overload	1.31	.07	22.89	-.10	18.67	-.18	30.01	-.16
Role Underload	6.93	.03	32.29	.03	33.61	.30	32.14	.34*
Role Insufficiency	10.36	.20	31.20	-.21	18.70	-.16	39.67	-.38*

* $p < .05$

associated with role stress in the study. Characteristics of principals and students, discipline issues, job characteristics, and certain demographic characteristics, on the other hand, had strong and consistent relationships with role stress.

Role Stress and Role Strain

The relationships between role stress and three sets of role strain--psychological, physiological, and behavioral--were examined, and these results are presented in Table V.10. Because of the greater clarity and utility of Pearson's product-moment correlations over χ^2 estimate, only the former statistics are reported in Table V.10 and subsequent tables.

Table V.10 shows many significant and strong associations between role stress and *psychological role strain*: Role underload is the stress most consistently associated with psychological strain--job dissatisfaction, nervousness and depression all bear relationships to this stress. Among the strains, job dissatisfaction and nervousness exhibit the most consistent association with role stress; each strain, however, is related to at least one symptom (and often several symptoms) of psychological strain.

Physiological role strain symptoms, by and large, do not show strong relationships with stress. But the number of psychosomatic symptoms *is* related, positively to role conflict and negatively to quantitative role overload. The latter finding is interesting: the higher teachers feel their work load is, the fewer psychosomatic symptoms they report experiencing. Overall physical health had no systematic associations with role stress.

Among the *behavioral role strain* symptoms, caffeine drinks were the

Table V. 10

Relationships between Role Stress and Role Strain
(Product-Moment Correlations)

	Role Conflict	Role Ambiguity	Quantitative Role Overload	Qualitative Role Overload	Role Underload	Role Inusfficiency
Psychological Symptoms						
Life Dissatisfaction (N=24)	.30	.16	-.29	.15	.04	.11
Job Dissatisfaction (N=24)	.39*	.26	.28	.60**	.47**	.06
Nervousness (N=19)	.02	.45*	.39*	.66**	.74**	.04
Irritation (N=17)	.09	.15	.32	.11	.34	.48*
Depression (N=19)	.04	.34	.34	.23	.52*	.27
Boredom (N=21)	.27	.23	-.18	.27	.36	.58**
Low Self-Esteem (N=19)	.39*	.13	.06	.34	.34	.22
Physiological Symptoms						
Somatic Complaints (N=24)	.40*	-.09	-.38*	.31	.14	.20
Overall Health (N=24)	-.25	-.12	.04	-.23	-.18	-.27
Behavioral Symptoms						
Caffeine Drinks (N=24)	.55**	.06	-.35*	.01	.02	-.04
Drug Use (N=24)	.09	-.13	.02	.07	.20	.25
Alcohol Use (N=24)	.03	-.14	-.16	-.33	.10	.18

* p < .05

** p < .01

only variables associated with the experience of stress. Once more, quantitative role overload has a negative association with caffeine drinks, and role conflict has a positive association with it. In other words, people feeling role conflict are likely to drink caffeinated beverages, but people with strong work pressures are not.

The qualitative data also suggested that there was reason to believe that the work-related experiences of teachers were related to symptoms of role strain.

> "We always have a happy hour on Friday to celebrate the end of another excruciating week."
>
> "This job has made me bored. I could do something more exciting, more challenging that would pay more, and I would probably have to spend less time at it."
>
> "In this job, I'm nervous all the time. When I get nervous, I get a nervous stomach, and I'll have acid."
>
> "My favorite thing in the world is beer. There are a lot of teachers who drink."
>
> "It completely wears you out."

To recapitulate, role stress is most consistently associated with psychological strain symptoms. In addition, role conflict and quantitative role overload are related to somatic complaints and caffeine drinks. Finally, the qualitative data indicate some association between stress and alcohol use.

Role Stress and Withdrawal

One purpose of the present study was to examine the extent to which role stress was associated with dysfunctional employee attitudes and behaviors--withdrawal tendencies and withdrawal manifestations. The results of these analyses are reported in Table V.11.

Table V. 11

Relationships (Product-Moment Correlations) between Role Strees and Withdrawal

	Role Conflict	Role Ambiguity	Quantitative Role Overload	Qualitative Role Overload	Role Underload	Role Insufficiency
Withdrawal Tendercies						
Binding Forces (N=24)	-.13	-.24	.00	-.33	-.08	-.56**
Distancing Forces (N=24)	.21	.37*	.09	.35	.07	.40*
Withdrawal Manifestations						
Tardiness (N=24)	-.60**	.22	.03	.28	.28	-.03
Absenteeism (N=24)	.46*	.08	-.02	-.08	.28	.02
Turnover Intent (N=24)	.31	.54**	.03	.47*	-.17	.14

* $p < .05$

** $p < .01$

The results show that the experience of role ambiguity and role insufficiency is associated with the rise of distancing forces; in addition, role insufficiency bears a negative relationship with binding forces. Thus, the stronger the role ambiguity and the role insufficiency, the more the teacher wants to get away from the school. At the same time, the incidence of role insufficiency is likely to reduce the strength of the binding forces experienced by the teachers.

In terms of the actual withdrawal manifestations, role conflict appears to be the most predictive--both absenteeism and tardiness are significantly related to this stress. In addition, the experience of stress often appears associated with the intent to turn over, especially when stress assumes the form of role ambiguity or qualitative role overload. Thus, teachers who experience conflict are likely to take short times off from the job, but teachers who are unclear about their job demands, and whose job demands are difficult, are likely to look for alternative job opportunities in the near future.

Qualitative information from the interview protocols also suggests that some teachers cope with role stress by withdrawing, to a greater or lesser degree.

> "I am usually late everywhere I go. I used to be late to school all the time last year. This year I haven't been late once--I guess it's because I'm enjoying myself so much."

> "This job is hard on me. So I try to take off every once in a while. If I'm sick, I take off. If my children are sick, I take off. Or if my husband needs me to go on a trip where he is sponsoring kids I'll take off for that too."

> "I take 'cop-out' days occasionally to get rid of the pressure from this job."

> "If I could quit tomorrow, I would."

In summary, both a qualitative and a quantitative examination of the data support the notion that role stress is related to withdrawal attitudes and behaviors among the sample.

Relationships Among Role Strains

It was argued earlier that the incidence of role stress would be particularly problematic if multiple deleterious effects of stress occurred simultaneously rather than alternatively. One way of examining the concurrence of the various strain symptoms is to focus on the intercorrelations among them. The results of such an analysis are presented in Table V.12.

The table shows that, predictably, the different psychological strains are correlated with one another (life dissatisfaction and depression are exceptions, to some extent), but not to the physiological and behavioral strain symptoms. Likewise, the two physiological strain measures were related to one another. The behavioral symptoms of strain, on the other hand, are not highly correlated with one another. In other words, the same people are not likely to be using caffeine, drugs, and alcohol. The only exception to this trend occurs with respect to drug use which is related to job dissatisfaction, irritation, boredom, and the physiological strain symptoms.

Taken together, the results suggest that there is some reason to conclude that the manifestations of role strain are correlated with one another. At the same time, however, the relationships *across* the subcategories of strain symptoms (viz., the behavioral, physiological, and psychological symptoms) are not as consistent as may have been expected.

Table V. 12

Intercorrelations Among the Role Strain Symptoms

	1	2	3	4	5	6	7	8	9	10	11
Psychological Symptoms											
1. Life Dissatisfaction											
2. Job Dissatisfaction	.05										
3. Nervousness	-.10	.57**									
4. Irritation	-.19	.40*	.59**								
5. Depression	.05	.17	.74**	.71**							
6. Boredom	-.12	.51**	.62**	.51*	.36						
7. Low Self-Esteem	.00	.49*	.42	.54*	.33	.65**					
Physiological Symptoms											
8. Somatic Complaints	.14	.36*	.05	.13	-.08	.09	.18				
9. Overall Physical Health	.34	-.35*	-.16	-.38	-.10	.01	-.43*	-.54**			
Behavioral Symptoms											
10. Caffeine Drinks	.33	.04	-.20	-.22	-.14	.04	.20	.34*	-.12		
11. Drug Use	-.11	.48**	.29	.61**	.14	.47*	.34	.38*	-.51**	-.10	
12. Alcohol Use	-.04	.01	-.02	.23	-.01	.09	.15	.24	-.23	.24	.27

* p < .05

** p < .01

Role Strain and Withdrawal

The final issue of relevance in the present study was the extent to which role strain was related to withdrawal tendencies and manifestations. The results of these analyses are presented in Table V.13.

In general, the table shows some support for relationships between role strain and withdrawal tendencies (distancing and binding forces) and between role strain and a "mild" form of withdrawal--tardiness. Absenteeism and turnover intent, presumably the more dysfunctional forms of withdrawal show only inconsistent relationships with role strain. Symptoms (with the exception of the relationships between turnover intent and caffeine and drug use).

Thus, it may be concluded that role strain does have an impact on the effectiveness of teachers' functioning, but is not necessarily likely to lead to the termination of employment.

Summary

The results of the present study provide some interesting insights about the role stress experiences of teachers. Among the major findings of the study can be included the following:

- Quantitative role overload is the stress experienced by teachers most often, followed by role ambiguity and role insufficiency.
- Interpersonal and job-related factors are the most important precursors of role stress among teachers. Specifically, discipline issues, student characteristics, lack of support from administrators, and low job variety are the most potent stressors. Some demographic characteristics, including sex, are also predictive of role stress.
- The occurrence of role stress is associated with the experience of strain--job dissatisfaction, nervousness,

Table V. 13

Relationships between Role Strain and Withdrawal

Psychological Symptoms	Binding Forces	Distancing Forces	Tardiness	Absenteeism	Turnover Intent
Life Dissatisfaction (N=24)	-.15 -.15	-.07 -.07	-.13 -.13	-.19 -.19	.28 .28
Job Dissatisfaction (N=24)	-.52**	.34*	.50**	.15	.13
Nervousness (N=19)	-.51*	.16	.40*	.15	.17
Irritation (N=18)	-.20	.18	.37	.29	-.43*
Depression (N=19)	-.39*	-.27	.10	.39	-.10
Boredom (N=21)	-.64**	.37*	.48*	.19	.04
Low Self-Esteem (N=19)	-.29	.39*	.46*	.13	.15
Physiological Symptoms					
Somatic Complaints (N=24)	-.20	.35*	.11	.22	.02
Overall Health (N=24)	.07	-.25	-.14	-.25	.12
Behavioral Symptoms					
Caffeine Drinks (N=24)	-.01	.36*	.17	.16	.44*
Drug Use (N=24)	-.40*	.25	.19	.01	-.49**
Alcohol Use (N=24)	-.21	.32	-.10	.28	-.22

* p < .05

** p < .01

fatigue, somatic complaints, caffeine intake, and alcohol use are most likely to occur as a result of stress.

- Role stress is related to dysfunctional employee behaviors--tardiness, absenteeism, and turnover may occur as a consequence of role stress.
- Many symptoms of strain can occur simulatneously.
- Symptoms of strain are associated with withdrawal behaviors.
- Stress has negative consequences, not only for the teacher experiencing the stress, but for the quality of the school, the quality of teaching, and the overall effectiveness of education as well.

Chapter VI

DISCUSSION

The results of the present study indicate that work role stress has many organizational antecedents. The interpersonal network surrounding a teacher's job, specific job characteristics, and demographic characteristics are critical in defining the extent to which teachers suffer role stress. The present study also demonstrates that role stress has deleterious consequences for the teacher; in addition, it can mar the effectiveness of teachers' functioning.

In fact, the results demand substantive modifications of the conceptual framework presented in Chapters II and III. Before discussing these modifications, however, it is well to remember the ways in which the methodology used in the present study affects the potential interpretations of the results.

Methodological Issues

The methodology used in the present study limits the interpretations possible from it; at the same time, it also confers many advantages to it. These constraints and benefits are discussed below.

Methodological Constraints

At least three sets of methodological constraints can be identified that limit the knowledge to be derived from the study and the generalizations possible from it. These constraints are imposed by the characteristics of the sample, characteristics of the data collection, and features of the analysis strategy.

The *sample* for the study was limited to one school district. Thus, the nature of the environmental constraints was relatively constant. Second, although variations were sought in terms of school characteristics, the realities of field research impinged on this ideal. That is, busing was introduced in the school district the year that the study was conducted, and "clear" distinctions among the schools in terms of neighborhood characteristics were no longer possible. Third, the sample was limited to only 25 teachers. Generalizations to the population of teachers at large from a sample so small can be fraught with problems. Fourth, a stratified random sample of teachers was obtained in the study. Despite the many advantages of this sampling technique, it also meant that teachers under great stress would not necessarily be interviewed. Some of the learnings possible only from extreme manifestations of the stress phenomenon, therefore, had to be sacrificed in the study. Fifth, only junior high school teachers were interviewed, and variations in stress experiences attributable to students' age and similar factors cannot be determined from the study.

The *data collection* strategy was the use of a semi-structured interview format to elicit information. Some problems were inherent in this strategy. First, interviews could last only for about one hour each, limiting the quantity and the richness of the information possible. Second, data were collected at only one point in time. Although day-to-day fluctuations in moods and experiences may have been randomized against, longitudinal patterns of stress were still indecipherable from the data. Third, data were limited to self-reports from the teachers, thus precluding inferences about "objective" stressors, strains, and withdrawal manifestations. Fourth, given the small sample size, it was impossible to detect possible biases resulting from interviewer/respondent pairings. Fifth, budgetary constraints necessitated abandoning the idea of generating transcripts from each interview. Coding of information was sometimes based on limited information, therefore.

Finally, the *analysis strategies* possible were also limited. An attempt was made to generate both quantitative and qualitative information from the interviews. Since both sets of data came from the same source, however, it was impossible to use the two kinds of data interactively and simultaneously to derive maximum utility from both sources. This strategy would have been possible had multiple data collection techniques been used. Second, given the small sample size, sophisticated multivariate analyses designed to tease out the predicted effects were not possible.

In short, much caution must be exercised in generalizing from the results of the present study. The sample, data collection techniques, and analysis strategies used must be borne in mind when the results are interpreted.

Methodological Advantages

Along with the constraints, many advantages also adhere to the methodology used in the present research. Once more, these advantages can be summarized under the headings of sampling, data collection, and analysis.

The *sample* for the study was described earlier. Because a stratified random sample of teachers was drawn, it was possible to get variations in the levels of independent and dependent variables among the respondents. In fact, some respondents in the sample experienced quite high levels of stress, while others resported experiencing few, if any, problems in their work lives. Second, because the sample was selected "randomly," some problems associated with the low N of the study were minimized. That is, it was possible to use parametric statistics and to generalize from the results to the teacher populations of the three schools. Third, the data were not subject to the charge of being "biased" because the teachers to be interviewed were specifically chosen due to their stress experiences. Fourth, three schools are not many, but yet enough to provide *some* variations along the critical organizational antecedents of role stress of interest in the present study.

The *data collection* strategies, likewise, had many benefits. First, open-ended questions were used and interpretations and elaborations allowed. Thus, the possibility that the data were inaccurate because respondents misinterpreted questions was minimal. Second, the provision of many "probe" questions also ensured that the information of interest was obtained. Third, because respondents were not limited in what they could say, better rapport with them was established and, as a result, the quality of information was superior. Fourth, the exploratory purposes of the present research were better served through the semi-structured interview format. Fifth, tape recording the interviews meant that questions and problems with the written notes could be resolved, if necessary.

The *analysis strategies* used in the study also had some advantages, the most important of which was the maintenance of close touch with the human qualities of the respondents. The use of sophisticated statistical techniques often so distances the researcher from his/her respondents as to render the results useless for most practical purposes. This problem could be avoided in the present study. The qualitative data were also useful in explicating puzzling findings and revising the conceptual framework.

Summary

As with most research, the present study had some problems and some advantages. The methodological limitations and benefits of the study focus on sampling, data collection, and analysis issues. These constraints and advantages must be kept in mind when interpreting the results of the study.

Substantive Issues

Many substantive issues are clarified and explained through the present study. Of particular interest are the predictable and unpredictable findings of the study, and the revisions to the conceptual framework that these findings entail.

Predictable Findings

As expected, teachers were under different levels of the different stresses. Most teachers felt that they had too much work to do, and many felt also that the expectations for their jobs were unclear and undefined. Teachers often also reported that they did not have the resources they needed to do their jobs well.

In terms of the organizational antecedents of role stress, characteristics of the principal, the students, the discipline, and the job were most likely to cause stress among the teachers. Both in terms of the principal/administrators characteristics and in terms of the discipline issues, the problematic areas were not the policies and procedures of the school per se, but rather the inconsistent implementation of these policies and procedures, and the lack of support from above that many teachers felt their decisions received. To the extent that the sampled teachers felt that their jobs were *not* monotonous, furthermore, they were less likely to report being under stress. Finally, the female teachers, as well as the less experienced teachers in the sample, experienced greater role stress than did the male teachers and teachers with some experience.

Role stress was related moderately to role strain and withdrawal in the present study. This finding was predictable, not only from common sense, but from the multitudinous other empirical investigations of the issue, some of which are reported in Chapter II. As expected, symptoms of psychological strain were most likely to be related to role stress, although the data indicated some tendency for the behavioral and physiological symptoms to be related to stress as well. Likewise, the different withdrawal manifestations showed moderately consistent relationships with role stress. Also, the role strain symptoms had some relationships with one another and with the withdrawal variables.

Unpredictable Findings

Of greater interest than the predictable findings are the unpredictable findings, at least from a conceptual standpoint. The present research, like many others, had its share of unexpected findings.

First, role conflict has generally been considered the most ubiquitous stress (e.g., Kahn et al., 1964; Miles & Perreault, 1976). In the present study, however, this role stress was not reported unanimously by the teachers. Three potential explanations for the relatively lower levels of role conflict come immediately to mind. First, several previous studies included quantitative role overload in their definitions of role conflict. Quantitative role overload was high among the teachers in the sample and the fusion of the two constructs would have resulted, in all probability, in reports of high role conflict. Second, it is possible that teachers in the present sample reported the levels of *received*, not *sent*, role conflict. For example, one teacher in the present study noted that if what she was told to do differed from what she thought she should do (person-sender conflict), she did what she thought was right anyway. Third, some previous research (e.g., Beehr, 1976) has indicated that the presence of autonomy on the job may mitigate the adverse effects of stress. If teachers in the present study felt free to resolve the role conflicts on their jobs, the severity of such conflict would be minimized considerably.

Environmental stressors, particularly occupational status, were expected to be strongly related to the experience of role stress. Although many teachers in the sample had severe problems with the negative perceptions of the teachers' role that people in the outside world often had, occupational status was not quantifiably related to stress in the study. It may be that strong relationships between occupational status and role stress could not be observed in the present study because of low variance on the occupational status variable. It may also be that occupational status has direct effects on role strain, and does not have an impact on role stress at all.

Organizational stressors also did not affect role stress significantly or consistently. This is hardly surprising in view of the small number of schools in the sample. It is hoped that future research will be able to obtain greater variations along this dimension than were available in the present study.

It was expected that characteristics of other teachers would affect the role expectations of the focal teachers and that the two sets of variables would be related. But the empirical results indicated otherwise.

An analysis of the content of the interviews suggested that colleagues are the *moderators* of the relationship between role stress and role strain, not the *precursors* of stress. In fact, this moderating effect was suggested by the conceptual framework of the present research as well as various empirical studies (e.g., LaRocco et al., 1980). Thus, several teachers noted that for them, talking to other teachers always helped when they were under stress. An empathic ear, they argued, was sometimes all that was necessary to relieve the pressures of the job.

Personality variables were unrelated to role stress in the present study. This result is probably attributable, at least in part, to the unreliability of the personality indices for the sample. (The average inter-item correlations were •13, •18, and •26 for the three indices.) What was surprising was the lack of association between deviance from normative climate and role stress. The probable reasons for this low association center on the fact that few teachers perceived themselves to be particularly different from the majority of the people in the school. The few "deviant" teachers in the sample did not constitute a large enough group to affect the results significantly.

The final set of unexpected results concerns the associations of physical health and drug use to the other variables of relevance. With respect to the former variable (physical health), it is possible that the sample was constituted of teachers with remarkable good health. With respect to the latter (drug use), however, it is possible that teachers were reluctant to report the use of psychotropic drugs, be they legal (e.g., librium, valium) or illegal (e.g., marijuana).

In view of the parameters for the study, then, potential explanations for the various unexpected findings can be offered. Only through replications and extensions, however, can the validity and utility of these explanations be determined.

A Revised Conceptual Framework

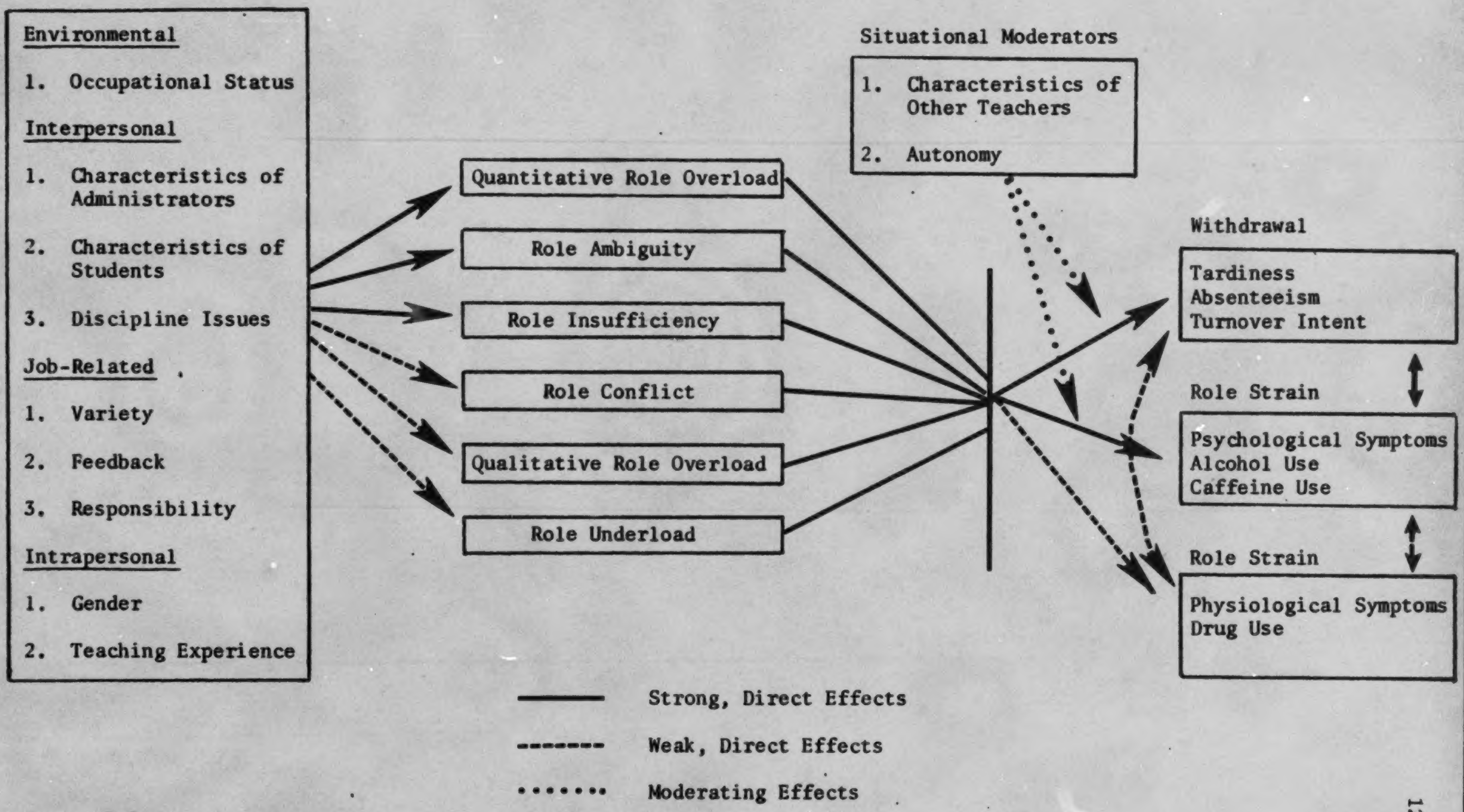
Based on the data that were obtained, and the methodological and substantive characteristics of the research, the conceptual framework outlined in Figure III.1 must be revised and modified. A revised conceptual framework is presented in Figure VI.1. When the two figures are compared, Figure VI.1 looks considerably simpler. The exclusion of variables from this revised figure were based on two considerations--(1) the relationship was studied explicitly, and the data did not point to a significant association; or (2) the relationship was not studied explicitly and did not emerge as salient in the teachers' reports of their work experiences.

Figure VI.1 shows the stressors that were critical in the work lives of teachers. The influence of these factors on role stress was discussed earlier. The solid arrows from the stressors to the role stresses indicate that the stresses more prevalent among the sampled teachers (viz., quantitative role overload, qualitative role overload, role ambiguity, and role insufficiency) are more likely to be affected by the presence of stressors than are the stresses less prevalent among teachers (viz., qualitative role overload, role underload, and role conflict).

The stresses, in turn, have differential effects on strain symptoms. Psychological health is much more likely to be affected by the presence of stress than is physiological health, and teachers are more likely to respond to the presence of stress than is physiological health, and teachers are more likely to respond to the presence of quantitative role overload,

Figure VI.1

Revised Conceptual Framework for Work Role Stress


Environmental
1. Occupational Status
Interpersonal
1. Characteristics of Administrators
2. Characteristics of Students
3. Discipline Issues
Job-Related
1. Variety
2. Feedback
3. Responsibility
Intrapersonal
1. Gender
2. Teaching Experience
Quantitative Role Overload
Role Ambiguity
Role Insufficiency
Role Conflict
Qualitative Role Overload
Role Underload
Situational Moderators
1. Characteristics of Other Teachers
2. Autonomy
Withdrawal
Tardiness
Absenteeism
Turnover Intent
Role Strain
Psychological Symptoms
Alcohol Use
Caffeine Use
Role Strain
Physiological Symptoms
Drug Use
Strong, Direct Effects
Weak, Direct Effects
Moderating Effects

role ambiguity, and role insufficiency than to the presence of the other stresses. Role stress may also lead to withdrawal manifestations among teachers, the most likely form being the intention to turn over to another job.

Role strain and withdrawal symptoms are related to one another. Once more, the role strains more strongly related to withdrawal manifestations are the psychological symptoms, and caffeine and alcohol use. Finally, the characteristics of other teachers and the degree of job autonomy moderate the relationship between role stress and role strain/withdrawal.

One question that the present study leaves unanswered is the extent to which the theoretical framework presented in Figure VI.1 is specific to the teachers in the present sample, or generalizable to other employee groups--teachers in public junior high schools, teachers in junior high schools, teachers in elementary and secondary schools, teachers in general, or employees in general. The establishment of the limits of generalizability of the findings of the present study must be one goal of future research in the area.

Chapter VII

IMPLICATIONS

In Chapter VI, the theoretical implications of the present results were discussed. The results of the present study also have implications for many groups of people. For instance, school administrators, teacher training/education programs, and the teachers themselves can learn from the present study. For all these groups, the results of the study are particularly significant because of the simultaneous impact of role stress on symptoms of strain and teaching effectiveness. The implications of the study for different groups are described below.

Implications for School Administrators

A clear implication of the present study is that work stress among teachers is not a problem just for teachers. On the contrary, school administrators must be concerned with the phenomenon, not only for humanitarian reasons, but for pragmatic reasons as well. Role stress affects a teacher's physical and mental health; it may also lead to dysfunctional behaviors among teachers--behaviors such as reduced efficiency, tardiness, absenteeism, and turnover.

These dysfunctional behaviors are costly for the school. Many substitute teachers must be paid, for example, to make up for those teachers who are absent. Likewise, turnover is expensive. Some people estimate that an organization loses the equivalent of 2½ months' pay for every employee who turns over--and this figure applies only to lower level employees in semi-skilled jobs! For jobs that require more training and experience, the losses are considerably greater. Because many turnover costs are hidden (e.g., personnel time in processing forms, loss in terms of efficiency, etc.), however, they are easty to overlook. But, in the long run, the costs of these dysfunctional behaviors can add up, and they can be debilitating for the organization's economy.

Not only are tardiness, absenteeism, and turnover expensive, they are disruptive to the smooth functioning of the school as well. A class that is frequently taught by substitute teachers, for instance, is likely to be less conducive to learning than one that is usually taught by regular teachers. Likewise, the overall climate of the school may suffer considerably if teachers come to work late, or if the roster of available teachers is always changing.

To the extent that work-related stress increases the likelihood that teachers will manifest these behaviors, it is in the interests of school administrators to attempt to ameliorate such stress. Furthermore, to the extent that the stress stems from properties of the school, it is in the *power* of school administrators to attempt to alemiorate the stress. Given the various precursors and their relative potency in our study, many suggestions can be derived about the ways school administrators can begin reducing teacher stress.

- There are many school properties that are beyond the administrators' power to change and control. For instance, the school administrator has relatively less direct influence on federal regulations regarding educational priorities than he/she does over the day-to-day functioning of the school. Focusing on those causes of teacher stress that are under their direct control minimizes the diffusion of administrators' energies and maximizes the focusing of concerted effort on those stressors that are most susceptible to change.

- Many of the teachers' complaints centered on their teaching assignments--they were assigned to teach subjects with which they had little familiarity. A good matching of backgrounds and assignments can probably be achieved with relative ease, and would be instrumental in relieving teacher stress.

- With respect to their work loads, different teachers in our study mentioned different problems. Within the same school, for instance, some teachers had five classes of the same subject (one preparation), while others had five totally different preparations. A more equitable distribution of work loads is probably conducive to stress reduction.

- Many teachers felt that they received conflicting demands from the school administrators. Thinking about the implications of each demand made on teachers would probably reduce some inconsistencies. Furthermore, some teachers remarked that different administrators made demands on them that were conflicting. Greater coordination *among administrators* about the demands relayed to teachers would probably relieve this problem.

- Teachers in our study felt that their jobs were ambiguous. If administrators worked with these teachers to clarify their job requirements, or assigned more experienced teachers to work with the newer teachers in clarifying their jobs, role clarity could probably be heightened, and another potential stressor removed from the work environment.

- A strong stressor in our study was qualitative role overload. Teachers reported that they had not learned classroom management skills in school, and many remarked that they had not acquired such basic skills as test construction, grading, etc. Needless to say, all these are essential to the smooth functioning of a class. Making in-service programs available to teachers so they can formally acquire these skills would be quite beneficial to the teacher and to the school as well.

- Since the more experienced teachers are the ones able to handle stressful classroom situations better, it may be beneficial to make class assignments in a way that minimizes the placement of 'new' teachers in stressful classes, and maximizes on the experience of the 'older' teachers in handling these classes.

- Many teachers were concerned because they felt they could not count on the support and the backing of the school administration. A uniformly compliant posture on the part of the school administration is probably as detrimental to school morale as it a uniformly belligerent posture. At the same time, however, it is useful to foster the perception that school administrators are teachers' friends, and people to whom a teacher can turn when he/she feels the need to.

- Many teachers reported that discipline problems were handled inconsistently by their school administrators, and that this undermined the teacher's authority with the students. A concerted effort by school administrators to mete out justice equally and fairly would be instrumental in alleviating this source of teacher stress.

- Teachers reported lower levels of stress when they perceived their jobs to have high levels of variety and low levels of repetitiveness and monotony. Thus, if classroom assignments are made in ways that some variety is assured, the degree of stress that teachers experience will be minimized. Of course, the earlier point of not having too many preparations should also be remembered here. The ideal would be for teachers to have some variations in their assignments, without being completely snowed under with preparations.

- Many teachers reported that they did not have the resources they needed to do their jobs effectively and efficiently. Principals and other administrators have control over the distribution of *some* resources. Beyond that, however, they are in the position to "lobby" school districts for the allocation of more resources for their schools. A major step toward relieving teacher stess could be achieved if the resources necessary to teach well were available to teachers.

- In many ways, principals and other administrators may be able to 'buffer' teachers against the harmful effects of stress. They can provide a sympathetic shoulder to cry on, lend an understanding ear for airing problems, and generally 'be there' when teachers need them.

These are some ways indicated by our study for administrators to help in reducing teacher stress. Two additional points are relevant here. First, stress is a subjective experience. It is based on how teachers *perceive* their work environments. Therefore, it is necessary to change, not only the objective environment, but the teachers' *perceptions* of the objective environment as well, if stress is to be relieved. In many cases, the objective reality may not be stressful; misperceiving their environment, however, the teachers may feel stressed anyway. Perceptions and attitudes are often harder to change than is the outside world. But perceptions are the immediate precursors of stress, and it is these perceptions that must be the focus of most change efforts.

Second, it is obviously impossible for any school administrator to implement *all* the suggestions listed above immediately and simultaneously. If teachers feel that the school administration is trying to relieve their burden, and if administrators work on reducing the stressors one at a time, however, a giant step toward rescuing teachers from intense stress will have been achieved.

Implications for School Teachers

Clearly, since teachers are the ones who experience the stress, it is important for them to reduce stress. From a physical and mental health perspective, as well as from the perspective of being effective, contributing members of the school system, it is important that stress be managed by teachers. Many action steps may indeed be taken by teachers to relieve the amount of stress they feel in their work lines. Some of these steps are discussed below.

- Teachers often perceived themselves as having less autonomy than they actually had. Many of the ambiguities they perceive in their work environment, for example, can be resolved by the teachers themselves. It was reported earlier that role conflict may have been low in the present study because the teachers were able to reconcile their conflicts. In a similar vein, ambiguities, overload, underload, and insufficiencies may also be within the power of the teacher to alter, to a greater or lesser extent.

- Overload problems often arise when multiple commitments are undertaken on the job and off the job at the same time. Occasionally, it is impossible to give up any of these commitments. More often, however, prioritizing one's goals and objectives is instrumental in separating the critical commitments from those that are desirable, but not necessary.
- A support network is almost always useful. Friends who understand the plight of teachers can serve as sounding boards, as feedback sources, and as resource providers. Thus, developing a group of friends, within and outside the school, can be critical to surviving in a stressful environment.
- Many teachers in the present study felt that their educational training did not prepare them adequately to cope with, and function effectively in, a junior high school environment. Other teachers remarked that inservice training programs were where they acquired many of their skills. Making maximum use of these and other programs should help bridge many of the training gaps that teachers feel.
- It is important to separate problems with one's perceptions from problems with the "objective" world. Sensitivity to one's environment is useful in internalizing or externalizing the locus of problems, as appropriate. In other words, when the problems reside in the teacher's perceptions of external reality, it is vital that they revise their perceptions.
- Sometimes, recognizing that "beating a dead horse" is useless can be constructive. If the teachers accept the unchangeable aspects of the school environment (e.g., the age and emotional maturity of the students), they may be able to cope with them better.

Thus, many facets of their work lives are under the control of teachers. With proper direction and emphasis, teachers can minimize the harmful effects possible from a stress-filled environment.

Implications for Teacher Training

A clear finding from the present study was that their education and training had not prepared teachers for what faced them in junior high schools. Most teachers reported that their early teaching years were filled with tension; only with experience did they learn to cope with the realities of teaching in junior high schools. Thus, the results of the present study have some implications for the training that teachers get prior to the time they begin teaching.

- Most respondents agreed that they had learned the content of what to teach in school, but had not learned any classroom management skills that were useful. Clearly, running a classroom, handling adolescent students, and retaining their attention are among the most important aspects of these teachers' roles--as important as, if not more important than, actually imparting knowledge. Whether they acquire these management skills through observations, through supervised "practice" sessions, or through some other means, it is vital that teachers learn these skills more thoroughly than is now the case. Education Departments must be concerned with this aspect of teacher training.
- Many teachers observed that it would have been useful for them to acquire some stress management and coping skills. Once more, these areas could be incorporated within the regular teacher training curriculum.

Summary

In this chapter, many implications of the present study were outlined. Implications were discussed in terms of the action steps that school administrators, teachers, and teacher training professionals can take to minimize either the negative impact of role stress or the stress-producing phenomena themselves.

Chapter VIII

SUMMARY

The present study was concerned with an exploration of the organizational antecedents and consequences of work role stress among teachers in public junior high schools. Role stress was defined as a received role demand that the focal person is unable to satisfy and which, therefore, poses a threat for him/her. The antecedents of stress were examined in terms of five stressor groups. Environmental stressors concerned the extra-organizational characteristics (e.g., role expectations from parents) that may impinge on the teacher's work life. Organizational stressors focused on characteristics of the organizational policies and procedures, as well as structural organizational properties. Interpersonal stressors concerned characteristics of school administrators, other teachers, and students that may stimulate the experience of role stress. Job-related stressors revolved around the nature of the specific tasks that teachers performed in their work roles. Finally, intrapersonal stressors were characteristics of the teachers themselves--their personality and their demographic characteristics--that may serve as sources of role stress for them.

The consequences of role stress were examined along two distinct categories. First, symptoms of role strain were of interest and second, manifestations of teacher withdrawal were also relevant. Strain symptoms were further subdivided into three groups--psychological, physiological, and behavioral strain. Three withdrawal manifestations were explored as responses to role stress, viz., tardiness, absenteeism, and turnover.

The research design entailed using semi-structured interview guides to elicit data from 25 teachers in three schools located in one school district. Schools were selected to represent diversity in terms of neighborhoods; within each school, a stratified random sample of teachers (stratified on sex and race) was obtained. Extensive notes were taken for each interview, and the interviews were also tape recorded.

The analyses involved an examination of the interview protocols both qualitatively and quantitatively. The results indicated that a wide divergence existed in the sample concerning the level of stress experienced. Quantative role overload was reported as being experienced most often, followed by role ambiguity and role insufficiency. Interpersonal, job-related, and intrapersonal stressors were significant for the teacher in the sample. Specifically, school administrators, students, discipline issues, job variety, gender, and teaching experience were the potent stressors in the present study. The strain symptoms most likely to occur as a response to stress were psychological in nature. There was also some evidence to indicate that caffeine and alcohol use were somewhat affected by the experience of stress. Finally, withdrawal manifestations also tended to be magnified in the presence of stress in the work place.

The conceptual thrust of the present study was revised in light of the empirical results that were obtained. In addition, the results suggested many practical steps that could be taken to reduce the stress experiences of teachers. These action steps were discussed in terms of three potential loci of change--school administrators, the teachers themselves, and teacher training programs.

Given the adverse effects of work role stress on the physical and mental health of teachers, and given the intensification of undesired behaviors as a response to stress, it is of urgent importance that change efforts be implemented immediately to reduce the levels of stress experienced by teachers.

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Appendix A

WORK ROLE STRESS INTERVIEW GUIDE

WORK ROLE STRESS INTERVIEW GUIDE

SUGGESTED INTRODUCTION

As you know, the Southwest Educational Development Laboratory is conducting a research study of the work role stress experiences of public school teachers. In this interview, I will be asking you questions about the extent to which you feel stresses and strains in your work as a teacher. It will probably take about an hour to complete this interview. I should emphasize again that your answers will be kept completely confidential, and that no one outside the research staff will know what you said. I hope you will feel free to express your real feelings with me.

I will be tape recording this session in order to ensure that I don't miss important parts of your answers. If you feel uncomfortable with the tape recorder on, please let me know, and I will turn it off, and only take written notes.

Do you have any questions about the study, or about this interview, before we begin?

1. I will be asking you some general questions to begin with, and later turn to more specific questions. First, how do you feel about life in general? Are you satisfied and happy?
   Probe: Why are you/are you not/satisfied and happy?

2. Do you like working for (SCHOOL NAME)?
   Probes: What do you like most?
   What do you like least?

3. Now I will ask you about some specific things that may or may not be problems for you in the school. Again, I hope you will be candid in your answers.

   Do you feel that people at school make demands on you that conflict with each other?
   Probes: Who makes the demands?
   How often does this happen?
   How much of a problem is this?

4. Is your job as a teacher clearly defined and predictable?
   Probes: In what ways is it not?
   How often does this happen?
   How much of a problem is it?

5. Do you feel like you have too much work to do at school?
   Probes: In what ways?
   How much of a problem is this?
   How often do you feel this way?

6. Do you think that you have the skills and training necessary for you to do your job well?
   Probes: What don't you have?
   How much of a problem in this for your?

7. Do you think you have skills, knowledge, training, experience, etc., that you would like to be using in your job as a teacher but cannot?
   Probes: What can't you use?
   Why can't you use it/them?
   How much of a problem is this for you?

8. Do you have the things you need (materials, equipment, space, etc.) that you need to do your job properly?
   Probes: What (else) do you need?
   How much of a problem is this for you?

9. Are there other aspects of your teaching job per se (rather than the school, students, etc.) that are problems for you?
   Probes: What are they?
   Why are they problems?
   How much of a problem?

10. Turning now to some other issues, I would like to find out some general things about your school and school environment.
    Do you like the administrators in this school, i.e., the principal and the other administrative staff?
    Probes: Specifically, who is problematic?
    What kinds of problems are there? (Not supportive, too task-oriented, unfair, authoritarian, etc.)
    How much of a problem?

11. How would you describe the other teachers in this school?
    Probes: Are they friendly, helpful, supportive?
    Do they gripe a lot?
    How much of a problem is this for you?

12. How about the students--any problems with them?
    Probes: What kinds of problems?
    How severe are these problems?
    How often do they occur?

13. How do discipline problems get handled?
    Probes: Is the resolution fair?
    Who comes out on top?
    Is this a problem for you?

14. How would you describe your teaching job itself?
    Probes: Are you really responsible for your students?
    Do you feel like you are doing the same things over and over?
    Can you find out how well you are doing? How?
    How much of a problem is this?

15. How would you describe the school overall?
    Probes? Is it too big?
    Is there too much work to be done?
    Is there too much paperwork?
    Are there too many rules?
    Do teachers have any decision-making authority?
    How much of a problem is this?

16. Now I would like to ask you some questions about yourself, what you like, how you react to the school, and so forth.

First, do you feel that school demands conflict with other demands on you from outside (e.g., from your family)?
Probes: From whom do these demands come?
How much of a problem is this?
How do you resolve the conflict?

17. Do you feel that your values are consistent with the values that prevail in the school?
Probes: In what ways are they similar/dissimilar?
Is this a problem for you?
How much of a problem?

18. Overall, how do you rate teaching junior high schools as an occupation?
Probes: Is this a problem?
How much of a problem?

18a. Is teaching in a junior high school more similar to teaching in a high school or an elementary school?

19. In general, how do you feel about yourself these days?
Probes: Do you like yourself?
Do you get annoyed easily?
Do you feel nervous and jittery a lot?
Do you get depressed easily?
Do you get bored easily?
How much of a problem is this?

20. How do you rate your general physical health?
Probes: Do you have any somatic complaints?
Do you have insomnia?
Have you had any serious problems recently?

21. Do you drink a lot of tea, coffee, colas, etc.?
Probes: What do you drink?
How often?
How much?

22. Do you use drugs or medication a lot?
Probes: Are these prescription drugs?
How about over-the-counter drugs?
Any other kinds of drugs?
How much do you use it?
How often do you use it?

23. Do you drink alcohol?
Probes: What do you drink?

How much?
How often?

24. Changing the topic some, do you sometimes feel the need to put the school, teaching, and students out of your mind?
Probes: Why?
How often?
What do you do about this feeling?

25. Why do you keep teaching?
Probes: What attracts you?
What keeps you from quitting?
How much of a problem is this for you?

26. Are you ever late to work, absent from work, etc.?
Probes: Which is it?
How often do you do it?
Why?

27. Do you intend to look for another job--teaching or non-teaching--in the future?
Probes: Why?
When?
What kind of a job?

28. What (other) strategies do you use to handle the stresses and strains that may arise from the job?
Probes: How successful are these?
How often do you use them?

29. I have a short questionnaire that I would like you to fill out now. It should take only a few minutes to complete.

Please check the response that applies to each question.

a. How long have you worked for this school?

(1) Less than 3 months
(2) 4-11 months
(3) 1-3 years
(4) 4-5 years
(5) 6-10 years
(6) 11 years or more

b. What was the size of the community in which you spent the largest portion of your time up to the time you finished high school?

(1) On a farm or ranch
(2) In the country, not on a farm or ranch
(3) A suburban town near a city
(4) A small city (less than 100,00 people)
(5) A large city (more than 100,000 people)

c. What is your marital status?

(1) Married
(2) Widowed
(3) Separated
(4) Divorced
(5) Never Married

d. Is your income the primary source of financial support for your family?

(1) Yes
(2) No

e. How many dependents do you have (others who depend on your income for their financial support)?

__________________________ dependents

f. Are you...

(1) Black
(2) Oriental
(3) American Indian
(4) Spanish Surnamed American
(5) White
(6) Other ______________________________

g. Which of the following ranges is nearest to your total income from your job last year?

(1) Under $4,000
(2) $4,000 - $5,999
(3) $6,000 - $7,999
(4) $8,000 - $9,999
(5) $10,000 - 12,999
(6) $13,000 - 15,999
(7) $16,000 - 19,999
(8) $20,000 or more

h. How many hours do you usually work per week on this job?

(1) Less than 20
(2) 20-29
(3) 30-34
(4) 35-39
(5) 40-44
(6) 45-49
(7) 50 hours or more

i. Overall, for how many years have you been teaching?

____________________ years

j. What grade level(s) do you teach?

____

k. What grade level(s) are you certified to teach?

____

30. Here are some self-description questions. Any answer that describes the way you feel or act is the right one to give. You may use any of the seven response options in answering the questions. Answer quickly rather than making a long decision on each question. Of course, if you want to think out some answer, please feel free to do so. It is your first impressions, however, which are the most important. Remember, you will not be identified with your answers.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
a. I hate giving up before I'm absolutely sure I'm licked	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. Our thinking would be a lot better off if we would just forget words like "probably", "approximately", and "perhaps".	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. Sometimes I feel that I shouldn't be working so hard, but something drives me on	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. I like to have a place for everything, and everything in its place. . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)

		Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
e.	I thrive on challenging situations; the more challenge I have, the better	(1)	(2)	(3)	(4)	(5)	(6)	(7)
f.	What young people need most of all is strict discipline by their parents	(1)	(2)	(3)	(4)	(5)	(6)	(7)
g.	In comparison to most people I know, I'm very involved in my work	(1)	(2)	(3)	(4)	(5)	(6)	(7)
h.	I don't like to work on a problem unless there is the possibility of coming out with a clear-cut answer	(1)	(2)	(3)	(4)	(5)	(6)	(7)
i.	It seems as if I need thirty hours a day to finish all the things I am faced with	(1)	(2)	(3)	(4)	(5)	(6)	(7)
j.	I think I am stricter about right and wrong than most people	(1)	(2)	(3)	(4)	(5)	(6)	(7)
k.	In general, I approach my work more seriously than most people I know	(1)	(2)	(3)	(4)	(5)	(6)	(7)
l.	Most people who don't get ahead just don't have enough will power	(1)	(2)	(3)	(4)	(5)	(6)	(7)
m.	I guess there are some people who can be nonchalant about their work, but I'm not one of them	(1)	(2)	(3)	(4)	(5)	(6)	(7)
n.	A few strong leaders could make this country better than all the laws and talk	(1)	(2)	(3)	(4)	95)	(6)	(7)
o.	The trouble with many people is that they don't take things seriously enough	(1)	(2)	(3)	(4)	(5)	(6)	(7)

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
p. My achievements are considered to be significantly higher than those of most people I know	(1)	(2)	(3)	(4)	(5)	(6)	(7)
q. People who seem unsure and uncertain about things make me feel uncomfortable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
r. People sometimes say that an insult to your honor should not be forgotten	(1)	(2)	(3)	(4)	(5)	(6)	(7)
s. I've often been asked to be an officer of some group or groups	(1)	(2)	(3)	(4)	(5)	(6)	(7)

31. Are there other aspects of your work life that you would like to discuss?

Thank you very much for your time. In the next month or so, we will send you a typed copy of this interview for your inspection. We appreciate your help, and we will provide you with a summary of the findings of this study as soon as it is ready. Again, thank you for your cooperation in this research effort.

Appendix B

LETTER TO POTENTIAL RESPONDENTS

Southwest Educational Development Laboratory
211 East 7th Street, Austin, Texas 78701

512/476-6861

November 21, 1980

Dear :

The Southwest Educational Development Laboratory under a grant from the National Institute of Education, is conducting a research study of the quality of teachers' work life. The study will explore such matters as the school-related factors that may be responsible for work stress among teachers, the severity of stress, and the consequences of such stress. The study will attempt to obtain information from about thirty teachers in three junior high schools. You are one of the teachers we would like to interview, and we request your cooperation in this study. Your name was selected on a probability basis from among the membership of the Austin Association of Teachers.

In the next few days, we will be calling you to schedule an interview with you at your convenience. The interview will take approximately one hour to complete, and we can conduct the interview either on the school premises or at another location of your choice. Of course your participation in the study is completely voluntary, but the cooperation of people like you is essential for the success of this research effort.

Please be assured that every effort will be made to maintain the confidentiality of the teachers we interview and of their school affiliations. All documents containing identifying information will be kept in secure files at the Southwest Educational Development Laboratory, and only the research staff will have access to them. Data analysis procedures will be designed to provide aggregate information on groups of teachers, rather than information on identifiable teachers or schools. The study is intended to generate information about the factors that cause, and the consequences of, work stress among teachers. The study is not designed to expose problems with specific teachers or schools. You will, of course, be sent a copy of the report on the study as soon as it is completed.

Let me emphasize again that your cooperation in this research effort is vital if we are to understand, and perhaps ameliorate, the stress experiences of teachers. If you have questions concerning the objectives or methods of this study, please feel free to call me at work (476-6861, ext. 237) or at home (836-5028). Thank you in advance for your cooperation in this important study. We appreciate your giving your valuable time to help in our research.

Sincerely,

Nina Gupta, Ph.D.
Project Director

Appendix C

CODING SCHEME FOR THE INTERVIEW

CONCEPT: LIFE SATISFACTION

QUESTION: I will be asking you some general questions to begin with, and later turn to more specific questions. First, how do you feel about life in general? Are you satisfied and happy?

General Level

1 = Low life satisfaction
2 = Medium life satisfaction
3 = High life satisfaction

Comments

1 = No comments
2 = Work-related reasons
3 = External reasons
4 = Work-related *and* external reasons
5 = "No reason to be unhappy"

CONCEPT: JOB SATISFACTION

QUESTION: Do you like working for (SCHOOL NAME)?

General Level

1 = Low job satisfaction
2 = Medium job satisfaction
3 = High job satisfaction

Reason for liking job	Reason for disliking job
(All coded 1 = mentioned; 2 = not mentioned)	
Extrinsic	Extrinsic
Intrinsic	Intrinsic
Interpersonal	Interpersonal
Students	Students
Teachers	Teachers
Administration	Administration
Discipline	Discipline
Physical layout	Physical layout
Bureaucracy	Bureaucracy
Other	Other

CONCEPT: ROLE CONFLICT

QUESTION: Do you feel that people at school make demands on you that conflict with each other?

General Level

1 = Low role conflict
2 = Medium role conflict
3 = High role conflict

Source (mentioned/not mentioned)

Time
Inter-sender conflict
Intra-sender conflict
Person-sender conflict
Person-role conflict
Other

# of stress sources mentioned

CONCEPT: ROLE AMBIGUITY

QUESTION: Is your job as a teacher clearly defined and predictable?

General Level	Source
1 = Low role ambiguity	1 = none
2 = Medium role ambiguity	2 = unpredictability
3 = High role ambiguity	3 = undefinedness
	4 = both
	5 = other

CONCEPT: QUANTITATIVE ROLE OVERLOAD

QUESTION: Do you feel like you have too much work to do at school?

General Level	Source
1 = Low overload	1 = none mentioned
2 = Medium overload	2 = # preparations
3 = High overload	3 = impinge on family time
	4 = # students
	5 = time + # students
	6 = hours
	7 = other

CONCEPT: QUALITATIVE ROLE OVERLOAD

QUESTION: Do you think that you have the skills and training necessary for you to do your job well?

General Level	Source (mentioned/not mentioned)
1 = Low overload	acquired with experience
2 = Medium overload	discipline problems
3 = High overload	other races
	specific classroom skills
	patience, motivation
	other
	# of sources mentioned

CONCEPT: ROLE UNDERLOAD

QUESTION: Do you think you have the skills, knowledge, training, experience, etc. that you would like to be using in your job as a teacher but cannot?

General Level	Source
1 = Low underload	1 = no problems
2 = Medium underload	2 = would like smaller classes
3 = High underload	3 = specific content area
	4 = too low-level
	5 = training other teachers/ administration
	6 = team teaching
	7 = time constraints
	8 = other

CONCEPT: ROLE INSUFFICIENCY

QUESTION: Do you have the things you need (materials, equipment, space, etc.) that you need to do your job properly?

General Level

1 = Low role insufficiency
2 = Medium role insufficiency
3 = High role insufficiency

Source (mentioned/not mentioned)

room size
supplies
clerical support
equipment
space
storage
building
working conditions
money
other

# sources mentioned

CONCEPT: OTHER STRESSES

QUESTION: Are there other aspects of your teaching job per se (rather than the school, students, etc.) that are problems for you?

Type

00 = None
01 = Content skills lacking
02 = Other duties
03 = Students
04 = Administration
05 = Organizational policies
06 = Low status
07 = Other teachers
08 = Incompatibility
09 = Too much work
10 = Non-work demands
11 = Uselessness of training
12 = Other

Severity

0 = inappropriate
1 = low
2 = medium
3 = high

CONCEPT: INTERPERSONAL STRESSORS -- ADMINISTRATION

QUESTION: Do you like the administration in this school, i.e., the principal and the other administrative staff?

Type-Principal (mentioned/not mentioned)

Authoritarian
Supportive
Fair
Inconsistent
Task-oriented
Organized
Honest
Communications
Other

Severity

1 = none at all
2 = small problem
3 = moderate problem
4 = great problem

INTERPERSONAL STRESSORS -- ADMINISTRATION (Cont'd)

Type - Other Administrators
(mentioned/not mentioned)

People problems
Communications
Supportive
Weak
Non-work demands
Task-oriented
Unfair
Other

Severity

1 = none at all
2 = small problem
3 = moderate problem
4 = great problem

CONCEPT: INTERPERSONAL STRESSORS -- OTHER TEACHERS

QUESTION: How would you describe the other teachers in this school?

Type (mentioned, yes/mentioned, no/ not mentioned)

Cohesive
Supportive
Complain a lot
Cooperative/helpful
Friendly
Hard-working
Too little contact
Dependable

Severity

1 = none at all
2 = small problem
3 = moderate problem
4 = high problem

CONCEPT: INTERPERSONAL STRESSORS -- STUDENTS

QUESTION: How about the students--any problems with them?

Type (mentioned, yes/mentioned, no/ not mentioned)

Discipline
Immaturity
Having them listen to R
Punctuality/home work
Ethnicity
Busing
Incompetence
Violence
Apathy
Other

Severity

1 = none at all
2 = small problem
3 = moderate problem
4 = high problem

CONCEPT: DISCIPLINE

QUESTION: How do discipline problems get handled?

Type (mentioned, yes/mentioned, no/
not mentioned)

Bureaucracy
Too strict
Too lax
Handled by R
Unfair
Inconsistent
Other

Severity

1 = none at all
2 = small problem
3 = moderate problem
4 = high problem

CONCEPT: JOB-RELATED STRESSORS

QUESTION: How would you describe your teaching job itself?

Job Variety Level

1 = low
2 = medium
3 = high
8 = not mentioned

Job Variety Problem

1 = no
2 = low
3 = medium
4 = high
8 = inappropriate

Job Feedback Level

1 = low
2 = medium
3 = high
8 = not mentioned

Job Feedback Problem

1 = no
2 = low
3 = medium
4 = high
8 = inappropriate

Job Responsibility Level

1 = low
2 = medium
3 = high
8 = not mentioned

Job Responsibility Problem

1 = no
2 = low
3 = medium
4 = high
8 = inappropriate

Job Importance Level

1 = low
2 = medium
3 = high
8 = not mentioned

CONCEPT: ORGANIZATIONAL STRESSORS

QUESTION: How would you describe the school overall?

Size Level

1 = small
2 = medium
3 = just right
4 = large
8 = not mentioned

Size Problem

1 = no
2 = low
3 = medium
4 = high
8 = inappropriate

Formalization Level

1 = low
2 = medium
3 = high
8 = not mentioned

Formalization Problem

1 = no
2 = low
3 = medium
4 = high
8 = inappropriate

Bureaucracy Level

1 = low
2 = medium
3 = high
8 = not mentioned

Bureaucracy Problem

1 = no
2 = low
3 = medium
4 = high
8 = inappropriate

Participation Level

1 = low
2 = medium
3 = high
8 = not mentioned

Participation Problem

1 = no
2 = low
3 = medium
4 = high
8 = inappropriate

CONCEPT: ENVIRONMENTAL STRESSORS -- NONWORK DEMANDS

QUESTION: Do you feel that school demands conflict with other demands on you from outside (e.g., from your family)?

Conflict Type

1 = no conflicts
2 = family demands
3 = low occupational status
4 = non-work expectations
5 = distance between work and home
6 = family demands and non-work expectations
7 = other

Conflict Severity

1 = no
2 = low
3 = moderate
4 = high
8 = inappropriate

CONCEPT: INTRAPERSONAL STRESSORS -- DEVIANCE FROM NORMATIVE CLIMATE

QUESTION: Do you feel that your values are consistent with the values that prevail in the school?

Inconsistency Level	Direction of Inconsistency	Inconsistency Problem
1 = none	1 = R too liberal	1 = none at all
2 = low	2 = R too conservative	2 = small problem
3 = medium	8 = inappropriate	3 = medium problem
4 = high	7 = no answer	4 = high problem
8 = inappropriate		8 = inappropriate

AACONCEPT: ENVIRONMENTAL STRESSORS -- OCCUPATIONAL STATUS

Status Rating

1 = low
2 = medium
3 = high

CONCEPT: ROLE STRAIN -- PSYCHOLOGICAL SYMPTOMS

QUESTION: In general, how do you feel about yourself these days?

Symptoms	Levels
Fatigue	1 = no
Nervousness	2 = low
Irritation	3 = medium
Anxiety	4 = high
Depression	9 = not mentioned
Boredom	
Self-Esteem	

CONCEPT: ROLE STRAIN -- PHYSIOLOGICAL SYMPTOMS

QUESTION: How do you rate your general physical health?

Somatic Complaints Type (mentioned/not mentioned)	Somatic Complaints Level	Overall Physical Health
Headache	1 = low	1 = low
Insomnia	2 = medium	2 = medium
Obesity	3 = high	3 = high
Hypertension	8 = inappropriate	
Cold/flu		
Other aches		
Other		

# symptoms mentioned

CONCEPT: ROLE STRAIN -- BEHAVIORAL SYMPTOMS -- CAFFEINE INTAKE

QUESTION: Do you drink a lot of tea, coffee, colas, etc.?

Coffee	Tea	Colas
1 = none	1 = none	1 = none
2 = low intake	2 = low intake	2 = low intake
3 = medium intake	3 = medium intake	3 = medium intake
4 = high intake	4 = high intake	4 = high intake

CONCEPT: ROLE STRAIN -- BEHAVIORAL SYMPTOMS -- DRUG USE

QUESTION: Do you use drugs or medication a lot?

Over-the-counter Drug Use	Prescription Drug Use
1 = none	1 = none
2 = low use	2 = low use
3 = medium use	3 = medium use
4 = high use	4 = high use

CONCEPT: ROLE STRAIN -- BEHAVIORAL SYMPTOMS -- ALCOHOL USE

QUESTION: Do you drink alcohol?

Beer Use	Liquor Use	Wine Use
1 = none	1 = none	1 = none
2 = low use	2 = low use	2 = low use
3 = medium use	3 = medium use	3 = medium use
4 = high use	4 = high use	4 = high use

CONCEPT: WITHDRAWAL TENDENCIES -- DISTANCING FORCES

QUESTION: Do you sometimes feel the need to put the school, teaching, and students out of your mind?

Strength of Distancing Forces

1 = low
2 = medium
3 = high

CONCEPT: WITHDRAWAL TENDENCIES -- BINDING FORCES

QUESTION: Why do you keep teaching?

Binding Forces Reasons
(mentioned/not mentioned)

Intrinsic
Pay
Holidays
Security
Experience
Locked-in
People
Other

Binding Forces Strength

1 = low
2 = medium
3 = high

CONCEPT: WITHDRAWAL MANIFESTATIONS -- TARDINESS AND ABSENTEEISM

QUESTION: Are you ever late to work, absent from work, etc.?

Absenteeism Level	Tardiness Level
1 = never absent	1 = never late
2 = low absence	2 = low tardiness
3 = medium absence	3 = medium tardiness
4 = high absence	4 = high tardiness

CONCEPT: WITHDRAWAL MANIFESTATIONS -- TURNOVER INTENT

QUESTION: Do you intend to look for another job--teaching or non-teaching--in the near future?

Reason for Turnover Intent	Strength of Turnover Intent
01 = not interested in work	1 = none at all
02 = to work in different school	2 = low
03 = pregnancy	3 = medium
04 = other job	4 = high
05 = salary	
06 = leave teaching	
07 = back to school	
08 = spouse transfer	
09 = for change	
10 = different content area	
11 = other reasons	
18 = inappropriate	

CONCEPT: OTHER STRESS MANAGEMENT TECHNIQUES

QUESTION: What (other) strategies do you use to handle the stresses and strains that may arise from the job?

Stress Management Techniques (mentioned/not mentioned)

Joking
Exercise
Outdoors
Personal Improvement
Family
Interpersonal
Other

# techniques mentioned

NOTE: THE REMAINDER OF THE INTERVIEW CONTAINED CLOSED-ENDED QUESTIONS, WHICH ARE CODED AS INDICATED ON THE INTERVIEW GUIDE.

CODING CONVENTIONS

The coding scheme was designed to describe the population of teachers in terms of their stresses, strains, and stressors. Two kinds of questions occurred in the interview--those for which "objective" coding standards could be established, and those for which the coding strategy was necessarily subjective. The processes used to code the two sets of questions are described below.

Questions with "Objective" Coding Standards

By and large, objective coding was possible for only some role strain indices. The standards used in the coding of these strain indices are described below.

Intake of Caffeine (Coffee/Tea/Colas)

Each beverage intake was coded in the following manner:

Never drink beverage	=	None	(1)
1-4 drinks per week	=	Low	(2)
5-7 drinks per week	=	Medium	(3)
8+ drinks per week	=	High	(4)

Drug Use (Prescription/Over-the-Counter)

Each drug use was coded in the following manner:

Never use drugs	=	None	(1)
Use drugs in rare cases	=	Low	(2)
Use drugs sometimes, as needed	=	Medium	(3)
Use drugs on a continuing basis	=	High	(4)

Alcohol Use (Beer/Wine/Liquor)

Each drink type was coded in the following manner:

Never drink = None (1)
1-4 drinks per month = Low (2)
5-29 drinks per month = Medium (3)
1+ drinks per day = High (4)

Absenteeism

This variable was coded in the following manner:

Never absent = None (1)
1-3 absences per year = Low (2)
4-6 absences per year = Medium (3)
7+ absences per year = High (4)

Tardiness

This variable was coded in the following manner:

Never late = None (1)
1-3 tardiness episodes per year = Low (2)
4-6 tardiness episodes per year = Medium (3)
7+ tardiness episodes per year = High (4)

The standards used to establish the "low", "medium", and "high" categories for the strain indices were different from those used for tardiness and absenteeism. Caffeine, drug, and alcohol use were coded into these three categories based on the Principal Investigator's familiarity with the prevalence of these behaviors among the population at large, and based on an informal survey of people regarding the frequency of their use of these substances. The relatively low cutoffs between the "low" and "medium" categories, and between the "medium" and the "high" categories, were considered appropriate in the present coding in view of the focus on the *use*, rather than the *abuse*, of substances. The cutoffs for absenteeism and tardiness, on the other hand, were determined on the basis of the relevant literature indicating the relative prevalence of these behaviors among employees. Thus, the "objectivity" in the coding relates to the classification of employees into four behavioral categories; some subjectivity was essential even here, however, in the determination of the standards used to demarcate the categories.

Questions Requiring Subjective Coding

For questions where subjective coding standards could not be established, a somewhat different approach was used to derive the codes used in the analysis. The conventions and strategies used for the different variables are described below.

Role Stress

For each role stress variable, two major pieces of information were used to generate codes for the level of stress experienced by the respondents. These were:

(a) How often the stress occurred in the work place; and

(b) How much problem the stress posed for the respondent.

For instance, for the role conflict variable, the respondents' answers were read to determine the frequency of exposure to conflicting role expectations. The interview protocols were also examined to assess the extent to which the respondents considered the presence of role conflict to be a problem for them. Frequency scores (often, sometimes, never/seldom) were derived from the literal statements of the respondents (e.g., "Every time my Principal tells me to do something, the Assistant Principal tells me something else" was coded "often", and "It's kind of nice to work where the administrators always speak with one voice" was coded as "seldom" for frequency of role conflict). Severity scores (great problem, somewhat of a problem, no/low problem) were derived from responses to the question "How much of a problem is this for you?", and from the general pattern of the respondent's answers to the role conflict questions. Thus, if the respondent noted that "Yes, I think it is quite a severe problem--I really wish they would get their act together", a code of "a great problem" was assigned, for instance, but when a respondent said "I don't care; it really doesn't affect me" a code of "no/low problem" was assigned.

The frequency and severity scores thus obtained were combined in the following manner to derive the overall score for role conflict:

Configurational Coding

		FREQUENCY		
		Seldom	Sometimes	Often
SEVERITY	No/Low Problem	1 Low	2 Low	3 Medium
	Somewhat of a Problem	4 Low	5 Medium	6 High
	Great Problem	7 Medium	8 High	9 High

Obviously, some judgements were necessary about the cells classified as "high", "medium", and "low" on Role Conflict. For instance, Cell 3 (low problem, occurs often) was classified as "medium" on Role Conflict, whereas Cell 4 (somewhat of a problem, occurs seldom) was considered "low" on Role

Conflict. Likewise, Cell 6 (somewhat of a problem, occurs often) was classfied as "high" on Role Conflict, whereas Cell 7 (great proble, occurs seldom) was classified as "medium" on the concept. These differential classifications were based on the rationale that a smaller problem occurring with some regularity probably is more serious as a stress, and would lead to more severe strain, than a problem of greater magnitude that occurs with less frequency. Again, although these classifications involve some degree of subjectivity, they were not arbitrary. Rather, the classifications arose from the conceptual framework, and from an examination of the factors that would most likely have adverse effects on employees.

Thus, the scores in the cells represent the overall levels of role conflict. Low conflict was scored (1), medium conflict was scored (2), and high conflict was scored (3).

In addition to the quantitative scores, the teachers' responses to each question were also coded in terms of the *kinds* of role conflict present--time conflict, inter-sender conflict, intra-sender conflict, person-sender conflict, and person-role conflict were reported by the respondents most often. The sources of role conflict were recorded simply in terms of whether they were present in his/her job for each teacher in the sample.

A parallel configurational procedure was used in scoring the other role stresses examined in the study. That is, frequency and severity scores were assigned to respondents on each stress, and these two facets were combined to derive the overall role stress score. The specific sources of stress within each category (i.e., sources of role ambiguity, sources of quantitative role overload, sources of role underload, etc.) were coded as listed in the coding scheme.

Role Strain

The coding conventions adopted for scoring the role strain variables (except those susceptible to "objective" coding) were somewhat varied. Life Satisfaction and Job Satisfaction were scored subjectively, for instance, according to the kinds of statements made by the respondents. Comments such as "I'm really enjoying my life (job) these days" and "I'm very happy with my life (job)" were scored "high" (3) on the Life (Job) Satisfaction index. Comments such as "I've seen better times, but I've also seen worse" and "I like some parts of my life (job) a lot, but not others" were scored "medium" (2) on the Life (Job Satisfaction) scale. Comments such as "I hate it" or "I can't wait to get out" were scored "low" (1) on the Job Satisfaction scale. Similar comments would have been scored "low" on the Life Satisfaction index also, but no respondent made such comments.

The other psychological strain symptoms (fatigue, nervousness, irritation, anxiety, depression, and boredom) were scored slightly differently. First, the kinds of strain symptoms mentioned by the respondent were recorded. In most instances, respondents did not mention *all* the symptoms listed above. Second, for those symptoms that the respondent did discuss, a severity index was developed, similar to that used in scoring the role stress variables. Thus, if the symptom occurred often, or if it posed a great problem for the respondent, a "high" score was reported on the index. If the symptom occurred sometimes, and if it was only somewhat of a problem, a "medium" score was reported. The rest of the coding also followed the conventions used for role stress, with one exception--if the respondent mentioned a symptom, but said that he/she did not suffer from that symptom, a code of "no" was assigned. In other words, non-occurrence was distinguished from low occurrence for the strains; such a distinction was not made in terms of the role stress variables.

Similar procedures were used to code the somatic complaints index. That is, the different somatic complaints mentioned by the respondent were recorded, and the severity of each complaint determined. In addition, the *number* of different somatic complaints mentioned by the respondent was counted. This count provided an index of the total number of somatic complaints suffered by the respondent.

Respondents also rated their general physical health. In this case, the respondents' descriptions of their health were accepted as accurate. In other words, comments such as "great", "good", and so forth were coded as "high" on physical health, comments such as "so-so", "had some small problems", etc., were coded as "medium" on physical health, and comments such as "I've had some big problems", and "It's not good", etc., were coded as "low" on overall physical health.

Withdrawal

Three sets of withdrawal variables were not susceptible to "objective" coding, viz., binding forces, distancing forces, and turnover intent.

The strength of distancing forces was assessed through a determination of the frequency with which respondents reported experiencing the need to put their jobs out of their minds. Those respondents who experienced these feelings *often* were classified as "high" on the strength of distancing forces, those respondents who experienced these feelings *only sometimes* were classified as "medium" on distancing forces, and respondents who *hardly ever* (or never) experienced these feelings were classified as "low" on distancing forces. A similar coding convention was used to assess the strength of binding forces.

Binding forces were coded, in addition, in terms of the source of the bond between the respondent and the organization.

The strength of turnover intent was coded according to the probability of the respondent's looking for another job in the near future. Those respondents who said it was likely that they would be looking for another job (or those who *were* looking) were classified as having high turnover intent (4). Respondents who thought it was only somewhat likely that they would look for another job in the near future were rated as having "medium" turnover intent (3), and respondents who thought there was only a small chance they would look for another job were classified as "low" on turnover intent (2). Finally, those respondents who saw no way that they would work in another job/school were classified as having no turnover intent at all (1).

Stressors

Coding conventions for the stressor variables were similar to those used with respect to role stress. For each category of stressors--environmental, organizational, interpersonal (principals/administrators, teachers, students, discipline), job-related, and intrapersonal--the *specific* sources of stress were first determined. A classification was then made of the severity with which respondents experienced each stressor.

With respect to organizational stressors, a description of organizational variables was first sought--what the school size was, how much bureaucracy there was, etc. Second, an attempt was made to determine whether these characteristics of the school posed problems for the teachers. For instance, one potential organizational stressor was size. For this variable, it was first determined whether the respondent thought the school was small (1), medium (2), just right (3), or large (4). Coding for school size was conducted directly from the respondents' statements, and those respondents who did not make descriptive statements about school size were assigned a "not mentioned" (8) code. For coding severity of size problems, the configurational analysis used with role stress was followed. That is, *frequency* of size-related problems was combined with the *severity* of size-related problems to derive an overall code for problems with size. A similar process was followed with the remaining organizational stressors, and with the job-related stressors.

Interpersonal and environmental stressors were coded in a parallel fashion, with two exceptions. Instead of descriptive coding for each interpersonal variable, only mentioned-yes/mentioned-no/not mentioned codes were used. For instance, the respondent might mention that his/her school principal was not at all authoritarian, unlike some of the other school principals he/she had encountered before. In this case, the respondent was assigned a mentioned-no code on the Principal Authoritarian variable. Severity of problems with each group of interpersonal stressors was averaged across specifics. That is, a severity code was not assigned to the Principal's authoritarianism, supportiveness, fairness, inconsistency, etc. Rather, respondents' answers across the relevant domains were averaged to provide an overall score for severity of problems with the school principal. The same procedures were used to code Other Administrators, Other Teachers, Students, and Discipline. The severity score in these cases was developed using the topological framework described for role stress. Environmental stressors were coded in the same way.

Only one intrapersonal stressor--deviance from normative climate--necessitated qualitative coding. The configurational coding adopted with interpersonal stressors was also followed here. One additional code was assigned, however. In addition to coding the level of, and the problems with, value inconsistencies, the *direction* of the inconsistency (i.e., whether the respondent was too liberal or too conservative compared with the school) was also recorded.

Conclusions and Cautions

The coding scheme used here necessarily focused on the *subjective* experiences of teachers. As such, no claim can be made that the teachers' responses reflect "reality." For instance, a teacher working in a 500-student school might report his/her school to be large, whereas another teacher working in a 1,000-student school might report his/her school to be medium-size. Since role stress is a subjective phenomenon, however, teachers' perceptions were considered more direct influences on stress and strain than was the objective reality. The coding conventions adopted for this study reflect these considerations.

An attempt was made to assess the relative levels of stress present in the work place of the sampled teachers. In this determination, the theoretical range of responses reflected the distribution present among the population at large, rather than only among the sample for the present research. Where coder subjectivity was necessary in making judgement calls, therefore, the Principal Investigator relied heavily on her previous experience in the area to derive a reasonable code, and to ensure comparability of codes across respondents.

Some degree of subjectivity is inevitable in any coding of qualitative data. By using only a few codes, however, the need to make fine discriminations was minimized. For instance, role stress was coded merely into three categories--high, medium, and low--because the probability of making marginal classifications was lower with these broad categories than with multiple and narrow categories. The likelihood of coder bias affecting the validity of the findings was, therefore, minimized.

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